

## CAUSES OF DISTORTION OF PUBLIC OPINION RESEARCHES

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This article will not deal with public opinion as a social phenomenon. Many questions about what is public opinion, who are its bearers, what is its content and how does it appear were asked in the past and it seems that many of them still haven't been answered sufficiently.<sup>1</sup>

The trivial and most easily accessible definition is that "Public opinion is the opinion of the public". However, it is far from solving the problem: What does it mean "public?" Who constitutes the public? Do all people belong to public, or only some of them? And possibly who?<sup>2</sup> Isn't it actually the other way round? Doesn't public opinion comprise rather of opinions and thoughts that are expressed publicly, no matter who expresses them and who listens to them? And in this case, what does it mean "publicly expressed"? Does it concern publication in media, quarrel in a pub or an argument of a married couple? When discussing public opinion, one easily comes across such problems and circular definitions. So far, there wasn't found a way out (There remains a question, whether it is actually desirable or even possible to find it...?)<sup>3</sup>

Unfortunately, we have to define the term in some way, if we want to go on working with it. In this place full of permanent ambiguities I prefer to use the operational definition of public opinion as an "opinion measured by public opinion surveys." Even though it is only a sort of a frail crutch, it is important to stress its indisputable advantage: even if the results of public opinion surveys did not represent the "true" public opinion, the substrate established by the operational definition – and therefore a theme for developing further ideas – remains.

The main axis of my thoughts and arguments can be called distortion, or, in a certain sense also manipulation. To be more accurate, I am trying to find out, whether distortion of results of public opinion surveys can result in manipulation of public opinion as such and if it is true, what does it mean for the researchers and those who use the results of their investigation.

### GENUINE INTENTIONS OF THE RESEARCHER...

Generally speaking, there is virtually inexhaustible number of methods, in which sociological survey results can be distorted. From ethical point of view, we can distinguish intentional and non-intentional distortion. This article is aimed at the latter.

To have an exhaustive picture, let us mention also the most the commonly observed possibilities of intentional, deliberate distortion of results of public opinion surveys. The cases of intentional distortion are - hopefully – less frequent, but also more dangerous. Not even experienced professionals are able to discover in the long lists of data and numbers, simple percentage tables, or commentaries to ciphers "in the background", whether they are dealing with serious conclusions of a serious survey, a biased interpretation of manipulated scrutiny or the desires invented by the author. There are many ways of obtaining results that one

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<sup>1</sup> Debates about the notion of "public opinion" and about its objective have been held since 18<sup>th</sup> century. Authorship of the term is attributed to J. J. Rousseau. G. de Tarde, J. Bryce, F. Tönnies, J. Habermas, E. Noel-Neumann have pursued the theme more systematically. See for example Šubrt, J. et al.: *Chapters from Public Opinion Sociology. Theory and Research (Kapitoly ze sociologie veřejného mínění. Teorie a výzkum.)* Prague, Karolinum 1998

<sup>2</sup> J.Habermas pursues the problem of public, public sphere and especially its historical changes in his book *Structural Change of the Public.* (Habermas, J.: *Strukturwandel der Öffentlichkeit.* Luchterhand, Neuwied am Rhein und Berlin 1965)

<sup>3</sup> As P. Bourdieu claims: „L'opinion publique n'existe pas!“ in.: Šubrt, J. et al.: *Chapters from Public Opinion Sociology (Kapitoly ze sociologie veřejného mínění. Teorie a výzkum.)* Prague, Karolinum 1998

desires to obtain. And as in a case of a serious survey, here too it depends only on the experience, courage, fantasy and financial means of the storyteller, which one of them he will choose. It is possible to collect formally “pure” data from intentionally selected sample of respondents, who express opinions that we want to find in the whole population (for example with voters of a certain political party). We can inconspicuously formulate questions in a way that that will deliver desired answers (for example: “Do you think, that the generally bad situation in the Czech Republic can improve?”). Or we can simply use statistical procedures and outcomes that will provide corresponding data (for example in a report about problems in an anonymous town: „Whereas number of cigarette smokers increased only by 5 percent, the number of marihuana smokers almost doubled!“)<sup>4</sup> There is simply no invention, that couldn't be misused and even public opinion survey (i.e. sociological research) is not excluded. Students learn about certain dangers of intentional and unintentional misinterpretation and about ways of avoiding it already in first lectures about methods and techniques of sociological research. In this way, they learn that it is not that difficult to find out what one wants to find out, that in commercial practice it is not always easy to resist financial rewards for “targeted” survey, that they will sometimes find out to their horror from the reaction of the critics to what extent they have unintentionally manipulated serious, long and carefully prepared survey.

It is really not difficult or exceptional to come across more or less manipulated, distorted or simply inaccurate results related to public opinion surveys. I believe, however, that in most of the cases it is not the intention of the researchers. Most frequently, the individual phases of the research are distorted due to the lack of attention, knowledge or consistency, rather than because of unclear intentions. It is also very probable that every research, in whatever way it is conducted and however perfectly it is prepared, is strictly speaking also a manipulation that cannot be avoided. We are confronted here with a principle similar to the one we know from natural sciences, that is, with the inevitable interference of the subject and the object of the scrutiny. The very act of the scrutiny determines its outcome, the form, in which the surveyed object is recorded.

## **WHAT IS IT THAT WE ARE INTERESTED IN?**

The above mentioned fact can be observed already in case of one of the most general sources of distortion, in the selection of the survey's objects. It is obvious that in a complex society, only a minute fragment of all phenomena, whose mutual interaction form the society, can become the object of scrutiny. Similarly, only a minute part of what people carry in their minds can become the object of public opinion survey. To define this sector is a fundamental and unavoidable act, by which we at least silently state what is worth scrutinizing and what is not. Thus we implicitly decide about the importance of individual components of reality.

If such a choice was only our business and if it didn't have further consequences, there would be no point dealing with it. However, it has further consequences and according to my opinion, they are not insignificant. By publishing the results of surveys, we translate our verdict about the importance of certain themes to the public, attempting to persuade them about what is (or even what should) and what is not important for them! The position of those who decide about the object of research is therefore not at all insignificant. Especially in a situation, when it is not the researchers themselves who invent the targets of their surveys with respect to their (purely) scientific intention, but when they accept commissions from external assigners, with regard to their (not less pure) profit. It is certainly not a coincidence

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<sup>4</sup> In reality number of smokers increased from 20 000 (40% of inhabitants of town) to 22 500 (45%), that is, by 2500 people, whereas number of marihuana smokers increased from 400 to 700, that is, by 300 people.

that a substantial part of public opinion surveys concern political issues, issues closely related to politics or at least politicised issues...

A really deep analysis of the structure and process of assigning themes of public opinion researches and its retrospective consequences for the public opinion itself is an issue for an individual study, which should contain factual (what do the research commissions at different agencies really look like), empirical (to what extent is the public opinion really influenced by the results of its scrutiny) and theoretical point of view (especially the roles of media: If the media are the assigners, who actually decides about the importance of certain themes? Is it those, who create strategies for attracting readers, or rather the readers themselves, because they prefer certain themes?)<sup>5</sup>

Let us stay on the course of “distortion – manipulation” and let us try to specify their general basis within the process of formulating the theme of research. It can be said that on this most general level we don't encounter distortion of research results (however manipulatively we can scrutinize the selected theme without further distortions – apart from those distinctive for the research itself). What happens here is a distortion of social reality, which cannot be avoided once we stress (from the research point of view) some selected theme. And if we want to, we can call such a distortion manipulation. We manipulate the picture that people create about society, in which they live, and about public opinion, which they (to a large degree unconscious) carry.

## HOW TO ASK?

Let us continue in the course of conducting sociological survey. It is typical for a public opinion survey that if we want to learn something about people, we have to ask them.<sup>6</sup> This fact is already enough to prevent us from obtaining public opinions, thoughts and attitudes in their pure form. Let us leave the philosophical question, whether there exists an attitude to a certain object in its “pure form“(that is, unburdened by interpretation of the given object) to some more theoretical article and let us concentrate on more specific issues.

Because we are now one step closer to the empirical level and it is easier to find specific arguments to support the claim that even this phase of the research is distorted (often not insignificantly). When talking about sources of distortion, lectures of sociological research theory usually dedicate their significant part to the problems of formulating questions, mentioning comprehensibility for respondents, halo effect or social desirability of the questions. To avoid these fireflies signalling danger doesn't mean that we will not soak our trousers in a swamp. On the way to obtaining answers of respondents, we often stumble over many sticks that get under our feet and we are often not able to clear them all from our way. The only thing we can do is to register their number and thickness. Still, it is a better solution than to stumble with a white stick and believe that we march on a pavement.

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<sup>5</sup> Interesting analyses of media and ways, in which certain themes (not only themes of researches) become „important“ can be found in P. Bourdieu: *About Television (O televizi)*. Brno 2002, Doplněk. Z. Bauman describes the change of media genre and theme structure looked up receivers (shift from public questions to dominance of private themes) in: Bauman, Z.: *Liquid Modernity (Tekutá modernita)*. Prague 2002, Mladá fronta, especially Chapter 2.

<sup>6</sup> To be more accurate, it is a typical feature of current common public opinion surveys, which are based on representative selection of respondents a standardization of asking questions, as established by G. Gallup. Other methods of obtaining information are of course possible, for example by direct observation. Typical example of such a method is Mass-Observation, practised in England since 1930's by Tom Harrison. For further information see: Adamec, Č.: To the Origins of Public Opinion (K počátkům výzkumu veřejného mínění). In: Šubrt, J. a kol.: *Kapitoly ze sociologie veřejného mínění. Teorie a výzkum*. Praha 1998, Karolinum

A research usually has to formulate the object of scrutiny, its definition, context and connotations. There is never only one way and one context in which to ask respondents about certain issue. It is always possible – and it is also necessary – to decide, which of the possibilities are more suitable. We have to consider, which possibility will bring more accurate results, which is most comprehensible and least complicated, which is comparable to the previous ones and provides results that are most convenient for further analysis. Modifications can assume different ranges.

We can ask about one thing from different points of view: For example: “Are the Palestinians the cause of conflict in the Middle East” or: “Are the Israelis the cause of conflict in the Middle East?” We can use formulate the same problem in completely different way. For example when detecting xenophobia, we ask the respondents for assessment: “Indicate on the scale from 1 to10 your sympathies for the following group of inhabitants...” or we can ask: “Which of the following groups you wouldn’t like to have as your neighbours?” Similarly, it is always possible to choose between several specific terms that express nearly the same thing. We can for example ask: “Do you think that the Czech Republic should deploy a field hospital in the military operation in Iraq?” or we can ask in a slightly different way: “Do you think that the Czech Republic should provide a field hospital for the military operation in Iraq?”

It is obvious that questions formulated in a different way, like offers of answers compiled in a different ways or set in different contexts, will bring different results, as it was proven in a number of experiments.<sup>7</sup> It turned out, for example, that the answers of respondents from two equipollent representative sets differed in case the formulation of question changed from *providing* a field hospital to *deploying* a field hospital.<sup>8</sup> The number of people, who agreed with providing a field hospital, was by ten percentage points higher than number of those, who agreed with its deployment, most probably because of completely different connotation of both terms (whereas “deployment” associates necessity of involvement, activity and also responsibility, “providing” evokes the sense of passivity: the one who is provided with our service, takes over the activity as well as responsibility...). The same thing works for other types of provided help, such as for providing/deploying anti-chemical unit or transport airplane.

Similar conclusions can be also drawn from experiment with commonly offered scales of answers. People express different levels of satisfaction with life, when they are offered scales with four points and when they are offered scale with five points. Even women and men differ in these cases.

It is certain that a question asked in an interview arouses certain cognitive processes that affect the formulation of answer. An answer to any question can be different from a spontaneous expression. Besides, it is evident that factors such as wording of questions, formulation of offered answers, definitions and connotations aroused by these definitions, as well as the context, in which the question is asked or atmosphere created in the course of the interview, influence the cognitive processes which lead respondents to mark the answers in the questionnaire.<sup>9</sup> And it is also obvious that all these aspects affect in a certain way the final

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<sup>7</sup> Besides those mentioned here many similar examples can be found in literature about cognitive aspects of questioning, for example: anthology of texts about different themes: Schwarz, N., Sudman, S. eds.: *Answering questions. Methodology for Determining Cognitive and Communicative Processes in Survey Research*. San Francisco 1996, Jossey-Bass Publishers

<sup>8</sup> Results of empirical survey of CVVM 0302, related to involvement of the Czech Republic in military operation in Iraq.

<sup>9</sup> Scheme of cognitive process is usually divided into four phases: understanding the question – evoking necessary information in memory – taking decision – formulating the answer. For further information see: Sudman, S., Schwarz, N., Bradburn, N.M. eds.: *Thinking About Answers. The Application of Cognitive Processes to Survey Methodology*. San Francisco 1996, Jossey-Bass Publishers

results. Identification of thought processes that participate in answering the question, as well as the search for those sticks that get in our way has been the aim of researchers for several decades. The cognitive approach to the problem of collecting data in sociological researches contributes considerably to mapping of such dangers. If they don't develop strategies for their elimination, they at least substitute blind glasses for dioptric ones.

How is it with distortion and manipulation on this level? As much as we would like it, opinions of people in their "pure" form cannot be detected by commonly used methods. We are always limited by the necessity to ask about them in some way, with all the consequences that I have foreshadowed. Willingly or unwillingly, our understanding is distorted and we often don't even realize to what extent. The situation, however, is not so serious to throw in the towel. If we come to terms with the inevitability of certain distortion and if we invest more energy to discover, what was the direction of the distortion and how big it was due to the parameters of our survey, we can avoid misleading and manipulation of our listeners, which we commit whenever we present the results of our researches as absolutely accurate, unambiguous and incontestable.

## **HOW EXACT ARE THE RESULTS?**

We often commit this transgression in other ways, for example by presenting results of frequency analyses in decimal form, on which we will concentrate now. By moving to this problem we descend one step lower in the logic of this article, directly to the empirical level. Even here, the distortion of the results of public opinion researches often occurs and as a result, the public opinion itself is manipulated as well.

Very often we can find out in newspaper articles information using following words: At the beginning of March 2003, 4% of legitimate voters would vote for ODS and 22,3% KSČM. With 22,2 %, ČSSD would come third. Or for example that support for ODS increased by 4,6 percentage points since the end of January and the Unionists gained 0,4 point, reaching the level of 4,7%.<sup>10</sup>

Let us think about what do the presented results tell a lay reader. If he is interested in the current distribution of political sympathies of the Czech public, he must certainly feel that he obtained very accurate and therefore valuable information thanks to this article. If you have offered results that are so precise...? It must have been a very precisely conducted survey if it permitted to present results with such accuracy. But anyway, what if someone wanted to be even more accurate and produce conclusions such as: „34,42 % of legitimate voters would vote ODS in March,“ or even: „...34,4187% of legitimate voters.“ Would it be possible, or is it impossible to get results of such accuracy?

Any student who has endured at least one semester of statistics should be able to answer unambiguously: of course it is possible! When presenting results of sociological survey, we can present every level of accuracy of decimal numbers. Unfortunately, it is not evidence of the researcher's erudition and precision but rather of his ignorance and lack of professionalism.

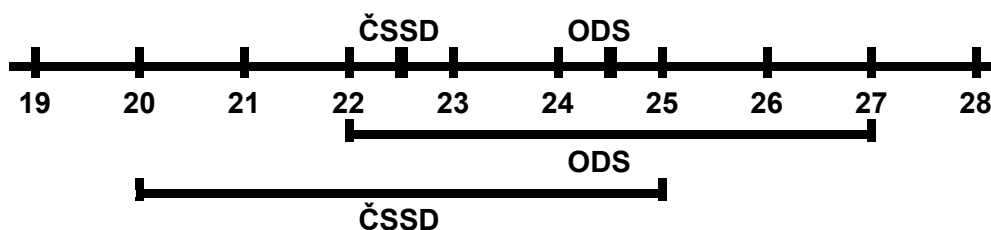
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<sup>10</sup> Právo, 14/3/2003, p. 1. Election prognosis is concerned, which is based on results of a survey. For illustrative purposes of the article we can presume that real values are concerned. (For further information see press information of TNS-Factum: *Stranické preference a volební prognóza* (Party preferences and election prognosis) from 13/3/2003.)

More accurate and serious formulation of results would have to sound somehow like:<sup>11</sup> “We are 95% sure that the real proportion of ODS voters is somewhere between 31,5% and 37,3%.” What does this complicated statement mean? First of all we admit the cruel truth that we are not able to say whether the real proportion is 32%, 33,6% or 35%, nor whether it is closer to the lower or to the higher limit of the interval. Whichever specific figure from this range we choose for publishing, it is not an accurate reflection of reality, but only its estimation. Second, there is also the five-percent possibility of completely wrong estimation, when the value measured would not fit even the calculated interval. In other words, if we conducted 100 of the same surveys of election preferences of ODS, the results of 95 of them would be in the calculated range, whereas the remaining five would be outside of this range.

It simply doesn't make sense (apart from several exceptions) to present results of frequency analyses of sociological researches with “accuracy” in decimal figures. The intervals of reliability can be calculated for each established value with the help of a simple mathematical formula and every researcher can usually decide for himself about the rate of accuracy, according to how precise he wants to be in his results. Usually he speaks about 95% or 99% probability, that his results hit the range, where the estimated value really lies.

The above mentioned statistical rule has a significant meaning for the interpretation of results of sociological surveys in many respects. It can be demonstrated again in an example of election sympathies of political parties. It is not so long ago when ODS and ČSSD lead the rankings of electoral preferences. Every months, research agencies “forced” both parties to compete for real primacy, when publishing results such as: “ODS overtook ČSSD by 2 percentage points and it would win the elections,“ or: “ČSSD with 22,5 % has come second behind ODS, which has gained 24,5%” However it is not a correct interpretation of obtained results. If we calculate intervals of reliability for ODS and ČSSD, we find out that they overlap, as it is apparent from the following picture.



And since no one can say for sure where exactly the real value of proportion of sympathizers of both political parties is located within the given range, it is not possible to conclude that “ODS overtook ČSSD.“ It is quite possible that in reality the numbers of their sympathizers is equal or that the number of ČSSD sympathizers is even higher – Blast all researches!

Understanding of basic statistic principles that I mentioned is necessary for a sociologist, it is welcome with a journalist or a commentator and it is useful for everyone, who has come across the results of a public opinion survey or sociological research in general. It will prevent a sociologist from doing non-professional work, a journalist from incorrectly interpreting research results offered by the sociologist, and it will prevent a common man from accepting the information offered by the journalist as undisputable.

<sup>11</sup> For precision: statistical rules and statements, mentioned further, are of course valid only for researches conducted by random selection. With quota selections these rules apply analogically (because there are no special roles for this type of selection), even though mathematical and statistical theory hasn't found any theoretical justification. That's why its use in case of commenting party preferences that are surveyed almost exclusively by quota selection method is not completely reliable. On the other hand, it is better to use at least these rules, than to pretend accuracy and infallibility.

It is obviously not possible to recommend, that the results of sociological surveys should be presented to the public in a theoretically accurate, however complicated form that I have demonstrated above. What can be recommended, however, is avoiding decimal numbers and distrusting such information automatically. At the first sight number 34,4% may look more precise than 34%, in reality, however, it expresses research results at least as precisely and certainly more seriously. If the commentator also dares to mention the relativity of presented data due to “statistical error”, or more generally, due to the unavoidable inaccuracy of the measurement, he should be praised...

To sum up, a professional will regard the use of decimal numbers as ignorant and non-professional rather than accurate. A common reader has a false impression that sociological research is an absolutely accurate method for public opinion survey. The public are either manipulated into the position of a trustful layman, who has to accept the seemingly accurate and unambiguous statement, due to insufficient understanding of the problem, or they are provoked to prevent themselves against this manipulation. However, the researchers will not benefit from this either because it will rather lead to general mistrust, refusal and rejection of research.

## **CONCLUSION**

Three examples that were analysed in detail are of course not the only sources of possible distortions or the only possibilities of manipulation with public opinion. However, they are significant as well as typical examples. With minimum simplification we can place them both on the chronological axis of the development of the survey and on the axis that expands between the poles of theory and experience. Even though we deal with the problems of distortion and manipulation, the character of these dangers is also different for both of them.

The issue of the choice of a topic is the most theoretical example and we can find it already at the very beginning of sociological research. Distortion that we necessarily commit during this phase is based on stressing the importance of selected topics to the detriment of other topics. With regard to subsequent public presentation of results we manipulate with the picture that the public create about the society, in which they live and about the structure of its consciousness, of which they are bearers.

The problem of formulating questions and answers, similarly to the context in which they are asked, is located on both scales. From the temporal point of view it is located between the phases of theme selection and the final interpretation of results. From the epistemological point of view it is close to the empirical level due to the possibility of practical verification. The character of distortion has different dimensions in this case. On one hand we manipulate with public opinion that we are currently scrutinizing, if we don't measure the material in its “pure” form but only in one of its possible interpretations. On the other hand we subsequently manipulate with public opinion as a receptor of our statements by presenting certain formulation as generally valid, precise and non-distorted.

Finally, the interpretation of results of our surveys is usually one of the final activities and at the same time it is situated on a completely empirical level. In this case, we distort and manipulate in a similar way as in the previous case, when we try to persuade the public that the results of our investigation are completely accurate and perfect, even though in reality it is simplification and (statistical) estimation.

As you see, there is plenty of space in sociological research for manipulation with the results of public opinion surveys as well as for manipulation with public opinion as such. However, as I have already mentioned several times, in many cases the distortions are unavoidable, arising from the very basis of the research, from the necessity to ask. It is therefore even more important that both researchers and expert public understand these

dangers. It is possible to get over certain distortions. The influence of many other distortions can be eliminated by monitoring and integrating them into the structure of our knowledge. It is often sufficient not to accept information passively. Public opinion research and subsequently sociological research is unquestionably an important tool for scrutinizing public. However, it shouldn't be used without thorough knowledge of its own drawbacks.