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### **Challenges in Spiral of Silence Research**

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#### **1. Introduction**

Over thirty-five years of spiral of silence research (beginning with Noelle-Neumann 1974; 1984) yielded important advances in understanding public opinion and with regard to methodology of surveys and content analysis (Scheufele/Moy 2000; Roessing 2009a; 2009b). However, there are still challenges in spiral of silence research concerning the areas of epistemology, theory, and methodology. It is the aim of this paper, to discuss some of these challenges, and to propose approaches for further research.

#### **2. Epistemology**

While the social sciences and the natural sciences share a common epistemology, based on Karl Popper's works and aimed at nomothesis (i. e. the discovery of scientific laws), there are important differences in detail. One of these special characteristics of social scientific epistemology is the fact that social reality changes, whereas the reality of most (albeit not all) natural scientists is usually stable. With reality changing and evolving, nomothesis is a tough challenge: "Laws would not be laws, if they are arbitrarily applied at one time, but fail at another occasion. " (Roessing 2006: 3).

Empirical research on the spiral of silence yields mixed results. It seems as if Noelle-Neumann's theory has a tendency to work, at least partially, in some cases in some places at some times – while failing, at least partly, at other occasions. Examples for this problem can be found in the "conclusion" or "discussion" sections of numerous empirical studies on the spiral of silence:

- Charles T. Salmon and Kurt Neuwirth (1990) found in their study of opinion climates and the willingness to discuss the issue of abortion that consistent with Noelle-

Neumann's hypotheses, "persons whose opinions were congruent with those of the national majority were more willing to speak to a stranger than were those whose opinions were shared only by a minority; however, the same result was not obtained for either a different mode of expression or system level. Factors such as involvement and knowledge were found to directly influence opinion expression [...]" (Salmon / Neuwirth 1990: 567). Besides the fact that this study identified marginal conditions relevant to the actual hypothesis, it was conducted in Madison, Wisconsin, U.S.A. in Spring 1986 and concerned an issue that is known to be especially disputed in the U.S. It is not known if the support for the spiral of silence would have been found in Beijing or in Vladivostok. Nor is it probable that the revealed relationship between willingness to speak and involvement and knowledge proves to be valid at other times in history or future.

- A study conducted by Jacob Shamir (1997) in Israel produced inconsistent results that were not stable over time. He found policy discontent and "the need for value expression" to be most powerful influences on the willingness to speak out. Maybe public opinion works different in the special environment of politics in Israel. However, Shamir found involvement to be strongly related to willingness to speak out as well. Together with the findings of Salmon and Neuwirth mentioned above, this might be an indicator of a mediating factor that can be found consistently across cultures and times.
- Dietram Scheufele and Patricia Moy conclude in their review of "Twenty-Five Years of the Spiral of Silence" that "a measurement of conflict styles could serve as a control for cross-cultural comparisons. If cultures truly differ with respect to how individuals handle conflict and deal with public pressure, this variable is crucial in revealing these cultural differences and providing further insights into the process of the spiral of silence" (Scheufele / Moy 2000: 21).

All things considered, long term longitudinal and at the same time cross cultural studies seem to be necessary to identify the interactions between public opinion, marginal conditions (e. g. cultural environment), and changes over time. Additionally, a closer look at literature and philosophy could help to make the theory of public opinion more precise and give it more explanatory power than Noelle-Neumann's original theory, which was designed for the analysis of German election campaigns.

### 3. Theory

The theory of public opinion and the spiral of silence as it has been developed by Elisabeth Noelle-Neumann contains some theoretical challenges. Some exist since the early days of scientific dispute about the theory. Others are new, due to new discoveries or changes in the structure of media and society.

The *voting booth problem* is one of the older problems, yet still unsolved. Why can public opinion influence election outcomes despite the fact that there is no public situation and no

social control in the voting booth? Critique concerning this point goes at least back to Salmon and Kline's (1985) analysis of the spiral of silence: "In a voting booth, [...], one would not expect conforming pressure to affect an individual's choice, because he or she is in private and his or her actions are not subject to the majority groups eye." (Salmon / Kline 1985: 9). Noelle-Neumann's proposal of a "consciousness of public opinion" that is active even in solitude, has never been operationalised in a suitable manner. To avoid the dangers of so called "ad-hoc hypotheses", social scientists are, as well as natural scientists, obliged to deliver a method for testing along with the proposal for patching theoretical flaws (Popper 2002: 61-63). The author of the present paper proposes to delve more deeply into the question how, and to what extent, public opinion alters actual attitudes vs. superficial behaviour (Kelman 1961; see also Salmon / Kline 1985: 9 f). Approaches to differentiate actual behaviour from answers to hypothetical questions already exist (e. g. Scheufele / Shanahan / Lee 2001), but none of them offers a real solution for the voting booth problem. Empirical observation is imperative to fix this theoretical problem and should be one of the focuses of future research.

The possibility of *regional or local processes of public opinion* has never been researched in detail. Noelle-Neumann developed her theory around analyses of voting behaviour and for the analysis of nationwide issues. She has always been very reserved against the idea of a plurality of public opinions within one society, albeit one of the central attributes of public opinion is its tie-up with space and time. It is plausible that there is a variety of opinions within one country towards one issue that one can publicly state without having to fear isolation. One example is the attitude towards the military, which presumably varies between leftist university towns like Freiburg (southern Germany) and large garrison towns like Munster (north-western Germany). Noelle Neumann herself, together with Thomas Petersen, presents an example for localised public opinion in a methodology textbook (Noelle-Neumann / Petersen 2005: 570-573): The conflict about a nuclear reprocessing facility in Bavaria was confined to a small local area. Further research on the minimum size of a "public" and the differentiation from group and family dynamics (e. g. Oshagan 1996) seems necessary.

Assumptions on the *functions of mass media* for public opinion processes are mainly based on information-centred media content, but not on entertainment. This constriction is not only unnecessary, in fact it is disadvantageous for understanding public opinion: It is highly plausible that widely used entertainment formats are at least as effective in shaping people's beliefs about acceptable public statements and behaviour as the news are. However, the exact ways by which entertainment interacts with politics, culture, other media content, and public opinion is still awaiting theoretical and empirical examination. This problem is at least partly new to spiral of silence researchers since the media environment has considerably changed since Noelle-Neumann developed the theory in the 1960s and '70s: At least in Germany, the supply with mass media channels providing entertainment (often of questionable quality) has skyrocketed in the meantime. Media change includes of course the completely new realm of online media: The theory of the spiral of silence has been

developed to explain election outcomes of the 1960s. Thus, there are huge deficits in theoretical examination of computer mediated communication, e. g. online communities, networking platforms, or Wikipedia (Roessing 2007, 2008).

#### 4. Methodology

As pointed out elsewhere (Roessing 2009b, 2009a) there has been a considerable amount of methodological research surrounding several tests of Noelle-Neumann's theses. Especially with regards to measuring one's willingness to speak (or show) one's opinions publicly researchers have developed a great deal of creativity. However, there are still many methodological challenges in spiral of silence research left. One of the most interesting problems concerns the measurement of the perception of a climate of opinion. Noelle-Neumann mainly uses two questions to identify the winning and the losing camps in a process of public opinion:

"Aside from your own opinion now, what do you think *most people* think? Are most people in the Federal Republic in favor of Communist Party members being appointed as judges, or are most people opposed?" (Noelle-Neumann 1989: 14, IfD Archive 3028, April 1976, italics original)

"How do you think things will develop – will more people or less people be in favour of nuclear energy a year from now in West Germany?" (Noelle-Neumann 1991: 277)

If the results from the question concerning the present and the one concerning the future differ, according to the theory, the latter is the more valid indicator of the opinion climate, and thus the better predictor for the willingness to speak publicly (Noelle-Neumann 1974: 45).

Some researchers from all over the world prefer another question to measure the perceived climate of opinion. They directly ask for an estimation on which percentage of the population favours or opposes one or the other position on an issue of public opinion. Jacob Shamir asked in his study on opinion distributions in Israel:

"If a referendum on the long-term solutions to the territories were carried out today, what do you think would be the results? What percentage of the public would choose to give up most parts of Judea, Samaria and Gaza in return for a peace agreement?" (Shamir 1993: 28).

Elisabeth Noelle-Neumann rejected the use of the so called percentage-method (although this rejection is not documented in any of her scientific publications, it once led to a memorable dispute between her and the author of the present paper). Asking respondents for a number between 0 and 100 can be criticised for mainly two reasons:

1. It is too complicated for most respondents to give such a precise estimate. To guess whether a majority or minority is for or against the issue at stake is much easier.
2. The theory of public opinion, especially the spiral of silence, is based on people's perceptions to be in the minority. It is this simple feeling, not a rational calculation based on precise estimates of numbers that lets people fall silent.

The empirical data on the percentage-method is sparse and the results are mixed. Thanks to Jacob Shamir there is a direct comparison between the dichotomous question and the question for estimation of percentages. On the one hand, Shamir experienced only six percent item-non response for the percentage-question compared with four to ten percent for the dichotomous format (Shamir 1993: 28). The percentage question is obviously not too complicated for most respondents – otherwise there should be more item-non response. On the other hand, most of the respondents stated quite wrong estimations, biased by their own opinion (Shamir 1993: 29; looking glass perception, cf. Fields & Schuman 1976).

Other empirical data has been provided by Noelle-Neumann's own Allensbach Institute. At the end of the 1970s there were a few explorative applications of the percentage method. In one survey the question read:

“This might be hard to tell, but what do you think, how many percent of the population have no good opinion of Franz Josef Strauss”? (IfD 3075, 1979)<sup>1</sup>

The results are presented in Table 1:

**Table 1: Climate of Opinion on Franz Josef Strauss as measured by the percentage-method**

Percentage (categorised)	Respondents* n=2005 %
0-10 percent	1,6
11-20 percent	2,5
21-30 percent	7,1
31-40 percent	11,8
41-50 percent	19,7
51-60 Prozent	15,4
over 60 percent	11,1
No answer, impossible to say	30,8
Sum	100,0

In this analysis the tendency of the perceptions (climate against Strauss) seems to be correct although there is a considerable amount of variance in the answers. But contrary to the findings of Shamir, the Allensbach findings suggest that at least German respondents do experience difficulties estimating percentages. 31 percent item-non response indicate that the question was not suitable to measure the climate of opinion. The Allensbach Institute

<sup>1</sup> „Das ist vielleicht schwer abzuschätzen, aber was meinen Sie, wieviel Prozent der Bevölkerung haben von Franz Josef Strauß keine gute Meinung?“

experienced similar, but lower, non response problems with the use of the percentage-method on the issues of politicians' wages (11 percent), death penalty (18 percent) and life-long imprisoning (27 percent) (IfD 3038, 3039).

All things considered, the applicability of the percentage method seems to vary with opinion distributions (Shamir's climate of opinion was nearly fifty-fifty while there was a strong climate of opinion against Strauss in Germany), and issues. General doubts concerning the ability of respondents to estimate percentages should be considered. A survey among students and staff of the Stanford University (!) led Diana C. Mutz to the conclusion: "It should be noted that respondents were not constrained to make percentages favoring and disfavoring divestment sum to 100 per cent, and nearly half of the respondents did not." (Mutz 1989: 10). However, the percentage method yields data of a higher measurement level which are required for elaborated statistical analysis. The conclusion of the present paper on this issue is to make use of the percentage method where applicable and necessary, but to be careful with the interpretation of the measured data:

1. The exact estimation of opinion distributions surely overstrains the ability of most respondents. However, categorised (maybe even dichotomised) data might be helpful for spiral of silence analyses.
2. The feeling which opinion is in the minority or losing ground that fuels spirals of silence will probably result in estimates over or fewer than 50 percent.

Yet, the percentage-method should only be used, if two prerequisites are given:

1. Item non response is no too high.
2. Sophisticated analyses that expect respondents to answer precisely and correctly and based on a rational analysis are not intended. Analyses of this kind are not suitable for research on the spiral of silence; the suppositious accuracy of the percentage-method does not alter that fact.

## 5. Conclusion

This paper addressed a few challenges in spiral of silence research – in fact there are many more.

1. *Epistemology*. A theory is valid if it is able to explain structures of reality. Since social reality differs between cultures and changes over time, it is difficult to predict outcomes of processes of public opinion and to test the spiral of silence hypothesis. Long term longitudinal and intercultural studies as well as theoretical studies of literature and philosophy are proposed to address this problem.
2. *Theory*. The voting booth problem, the size of the public required for processes of public opinion, and entertaining media content (together with online media) are areas where the original theory needs specification, clarification, and the implementation of new aspects. Empirical research on the formation of attitudes,

group- and small public dynamics, entertaining and online mass media is advised as a profound basis for theoretical enhancements.

3. *Methodology*. The percentage-method can cause problems with respondents and lead to analyses that are not adequate for spiral of silence analyses. Yet it is somewhat popular among international researchers and yields ratio-scale data. Restricted and cautious use is proposed by the present paper, based on observations by Noelle-Neumann and Shamir.

Elisabeth Noelle-Neumann once stated that science was at the very beginning of researching the social nature of humans, that it was “like a garden one can take a lonely walk in” (Noelle-Neumann 2001: III, translation by TRG). In the meantime, this garden obviously has become a quite popular place for scientific walks – however, the ambulating scientists still have reason to be amazed of its size and the complexity of its paths.

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