

The challenge of the spiral-of-silence theory

Theoretical Implications and Empirical Evidences

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This article describes the state-of-the-art of Elisabeth Noelle-Neumann's theory of the dynamics of public opinion processes called the "spiral-of-silence-theory". The theory comprises several single hypotheses which relate to different fields of social sciences-behavioral and attitudinal psychology, communication research and social theory. Its core assumption is the hypothesis that individuals have a fear of isolating themselves in public situations and thus tend not to proclaim their own opinions when they perceive the majority of their fellow citizens to hold the opposite point of view. Noelle-Neumann's approach has been discussed and criticised by scholars from different fields. Nevertheless, the empirical evidence up to now seems to underline that it has the potential to explain some of the variance in individual behaviour and in the dynamics of public opinion processes.



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A Main theses and scholarly foundations

The theory of the spiral of silence developed by Elisabeth Noelle-Neumann since the early seventies represents an attempt to describe the process and function of "public opinion" anew and at the same time to make it empirically verifiable. Within the overall concept of public opinion the "spiral of silence" is simply a specific hypothesis about the macro-consequences of processes of public opinion (see below); however, the concept stands for the entire theory (1). The latter is essentially based on findings from three areas of scholarship:

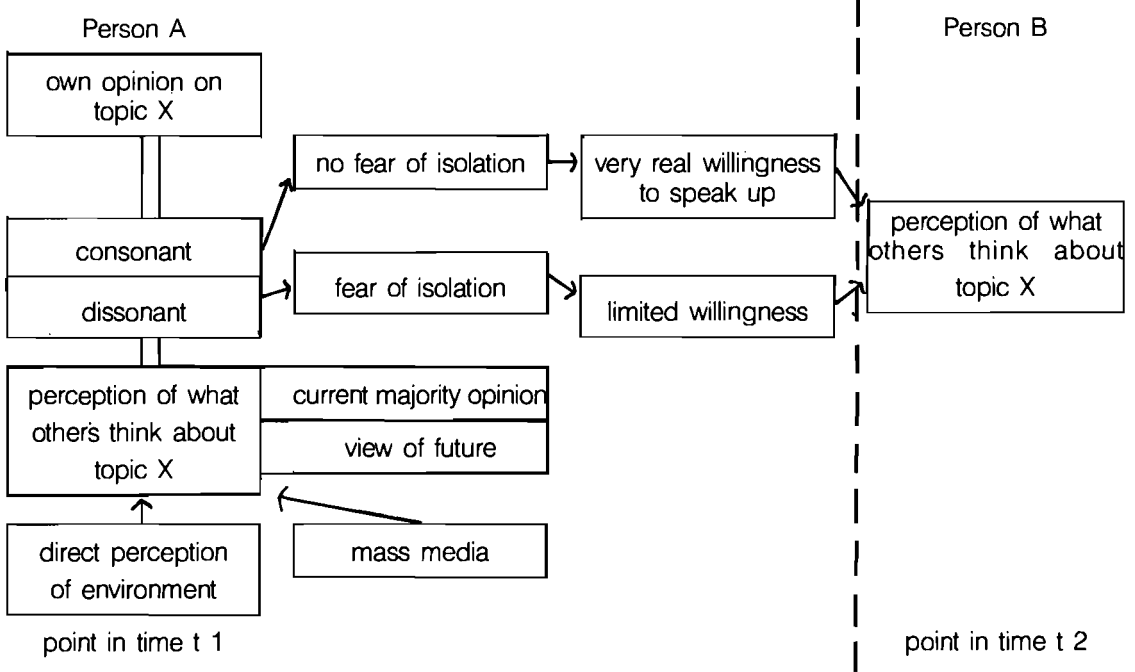
1. Findings from the history of philosophy about the interpretation of public opinion, historically speaking.
2. Social psychological findings about behavior in public situations, as well as
3. Findings from communication research about the role of the mass media in perceptions of the distribution of opinion in the social environment. In methodolog-

ical terms, Noelle-Neumann's theory represents progress in survey research, in particular as an opportunity to test the effect of different stimuli experimentally by means of the split ballot procedure (2).

Noelle-Neumann's concept can be taken as a macro-theory, since it comprises connections between psychological and sociological variables from the theory of communication. The different hypotheses for these three areas may be summarised as follows:

1. In the psychological area of behavioural and attitudinal theory
 - a) An essential motive for social behaviour is the desire not to isolate oneself from one's social environment. This hypothesis is based on experimental findings by Asch and Milgram about conformist behavior in groups (3), showing that

Figure 1: Dynamic model of public opinion according to the theory of the spiral of silence



in a situation of group pressure people are willing to go along with the majority even when this opinion is obviously wrong. However, for a long time, conformity was considered a result of imitation by learning or an expression of a "mass spirit".

- b) People have the ability to perceive the distribution of opinion in their environment on different topics relatively exactly. Rather than being limited to the perception of opinion in their reference group, this also includes the anonymous public. Noelle-Neumann refers to this ability as the "quasi-statistical sense".
- c) So as to avoid isolation, people tend to keep silent about their own opinion, if they believe that current or future majority opinion is against them. Conversely, persons who believe majority opinion is on their side tend also to show their convictions in public.
- d) When the time factor is included, a dynamic situation results from the social psychological hypotheses described, with the (actual or apparent) majority group always appearing to be stronger in public and the (actual or apparent) minority group always appearing to be weaker than they really are. This results in a spiralling

process, from which the theory derives its name.

- 2 In the area of communication research
 - a) There are two different sources available to observe the environment, direct observation of the social environment and indirect observation of the content of the mass media. While direct observation essentially shows which views will serve to isolate one in public, media content mainly suggests how the majority thinks.
 - b) In addition, the mass media have an "articulation function" in this process, by expressing certain points of view and not expressing others. The articulation function comprises both content and form: Certain points of view are given preferential treatment in the media and thus are more strongly represented and, at the same time, the means of expression are provided for these points of views, making it easier for people who take this position to express it than those who hold a different opinion and are not provided with this aid to articulation by the media.
 - c) The effect of the mass media is especially strong in this process when media content is extremely consonant. The opinion propagated seems especially strong and the lack of choice available makes it impossible to devote selective at-

tention to content which is aligned with the recipient's own opinion.

d) Thus journalism has a considerable influence on the process of public opinion and is instrumental in changing social and political opinions and attitudes.

3 In the area of social theory

a) The system of mutual observation and of "punishing" deviants by social isolation has the latent function of strengthening the entire social unit. A minimum degree of conformity among the members of society, and a commitment to norms and values held in common, result in the integration essential to society. In this interpretation, public opinion is a "social skin", which holds together the entire system.

b) The government must also abide by the law of public opinion. Referring to Machiavelli and Hume, Noelle-Neumann claims that even in an authoritarian political system no government can permanently stay in power without the approval of public opinion (4).

While she does not include all of the different elements of the theory presented here in her definition, Noelle-Neumann defines public opinions as "attitudes or behaviours one must express in public if one is not to isolate oneself; in areas of controversy or change, public opinions are those attitudes one can express without running the danger of isolating oneself" (5). Figure 1 provides an overview of the most important elements in this dynamic model of public opinion, without, however, including all of the factors contained in the theory.

B A challenge to the social sciences

Noelle-Neumann's theory represents a challenge to the social sciences for a variety of reasons. First, it is a macro-theory, which includes several areas traditionally viewed separately in the social sciences, which tends to isolate individual variables. The area covered by the theory extends from social behaviour in public and group situations to the effects of the mass media and assumptions about the latent functions of the processes described in the social system. Thus Noelle-Neumann's theory paradoxically has something in common with the approach of "critical theory" but, in contrast to such theory, it claims that at least part of the overall concept is empirically verifiable (6).

The philosophical tradition which Noelle-Neumann takes as the context of her theory also represents a challenge. She originally took the concept of public opinion in Locke, Hume and Rousseau

as her point of departure. In the meantime, research into philosophical sources initiated by her has found key passages for understanding public opinion and social control in Montaigne, Machiavelli and even in text from the antiquity and the Old Testament (7). Thus the concept of public opinion, which had increasingly become undefined in recent decades (8), has reappeared in a clear and empirically verifiable form; in addition, Noelle-Neumann has claimed that a pan-cultural phenomenon is involved which has essentially existed in all historical epochs and was already described as such by important philosophers at an early stage of history.

The role of the mass media represents a third challenge in this concept of public opinion. Noelle-Neumann assigns the media and journalism a decisive role in the process of political opinion formation and social change, thus also raising the question of legitimizing the influence of journalism on society (9). She describes herself how strongly the media have responded to this challenge by her theory (10).

Finally, Noelle-Neumann's theory is provocative due to the opportunities for practical application — including the political dimension — it presents. The author's hypotheses are essentially based on observing the political debate and election campaigns. The empirically tested findings were then translated into political planning. Many social scientists reject this utilisation of findings from the social sciences in principle or due to taking different political positions (11).

C Initial conditions of the spiral-of-silence-theory

The probability of a theory failing the test of reality increases in line with how generalisable it is: The less the theory can be applied to different constellations of reality due to its initial conditions, thus limiting its applicability, the more likely different features of reality are to conflict with it. This problem applies to the theory of the spiral of silence in two respects. First, it includes a lengthy causal chain of variables at different social levels and, at first glance, it appears to represent a general theory about opinion processes in the public sphere. In her initial publications, Noelle-Neumann emphasised that the causal process she was claiming to exist could only take place as described, given certain constellations.

She has defined three factors as constituting essential initial conditions: 1. The areas of opinion or

attitude involved must be areas which are in flux, where a change is occurring. In societies or social periods in which no such change is occurring, the individual is familiar with the dominant norms and opinions and there is nothing to set a spiralling process in motion. 2. The opinions involved must have a clear moral dimension, so that the debate is not about the rationally right or wrong position but about the morally good or bad position. 3. The mass media must take an identifiable position in the process involved. Areas of opinion which involve political controversy, but in which the media do not speak out or barely report at all, are not subject to the laws described by Noelle-Neumann (12).

Several of the objections to the theory expressed by the critics are ruled out when these initial conditions are taken into consideration, for example Noetzel's classification of the "spiral of silence" as a theory of rational political attitudes (13). This is exactly what the theory is not. The effect claimed by the theory is essentially based on the irrationality and emotionality of perceiving and dealing with reality. The initial conditions which are frequently misunderstood also include the role of the mass media in the process of public opinion. Noelle-Neumann has repeatedly pointed out that empirical tests of her theory are essentially meaningless if the tenor of the media on the topic studied is not included (14). Because of the limited data available, however, she herself has often published empirical data about the "quasi-statistical-sense" and the willingness to speak up on a given topic without having content analyses on the same topic at her disposal (15). It is her belief, however, that conclusions about the content of the mass media can be drawn from survey data: In Noelle-Neumann's thinking, the phenomenon of pluralistic ignorance, i.e. the majority being mistaken about the majority, and of a strong willingness on the part of the actual minority to speak up while there is at the same time a "silent majority", are empirical indicators for media content.

The open design of the theory of the spiral of silence in pan-cultural and historical terms does not require media content as a factor of influence, since fear of isolation is defined as the most important stimulus to action. The resulting observation of the environment, which takes the form of functional behaviour, needs only to include the media insofar as the technical opportunities presented by the mass media in modern societies open up com-

munication between individuals above and beyond complex social structures, and insofar as politically controversial topics have high news value for the media and thus are reported and commented on by them. It is thus only because of the historical conditions of western democracies that the variable of the mass media is an essential component of the theory (16).

D Theoretical criticism of the theory of the spiral of silence

As was to be anticipated, the challenge which the theory of the spiral of silence in many respects represents to established social science, has resulted in a number of critical debates, which the author of the theory considers helpful and necessary to the further development of her approach (17). If we omit general and superficial contributions (18), the essays by Noetzel, Salmon/Kline and Glynn-McLeod represent the most well-founded theoretical analyses. The criticism essentially focuses on the following areas:

- 1 The importance of reference groups to fear of isolation, perceptions of the environment and the willingness to speak up as an alternative hypothesis to the influence of the anonymous public and the mass media claimed by Noelle-Neumann;
 - 2 The importance of theories other than the avoidance of social isolation claimed by Noelle-Neumann in describing and interpreting social behaviour;
 - 3 The dependence of the individual's overall fear of isolating himself in public by minority opinions, as claimed by Noelle-Neumann, on individual personality characteristics;
 - 4 The conflict between theories of social perception of the environment other than the "quasi-statistical-sense" claimed by Noelle-Neumann, by means of which the individual is able to perceive his environment relatively precisely.
 - 5 The conflict between the role of the mass media claimed by the theory of the spiral of silence in influencing social perceptions, attitudes and values and paradigms showing the media to have a weak influence or none at all or alternatively, stating that the media serve to preserve the social status quo.
- ad 1: Noelle-Neumann's theory has breathed new life into the concept of "the public" as concerns communication research. "Public space" and the "consciousness of the public"

to her represent situations in which our social nature is particularly evident. Along with the mass media, the anonymous public is a source for perceptions of the environment and it is a potential authority putting sanctions on statements which may result in isolation from others. Some authors believe this hypothesis is contradicted by findings about the role of reference groups. One objection is that relations with relevant social groups are far more important than an anonymous public both as regards perceiving the environment and as concerns opinion formation. Even if the individual has the ability — disputed by some authors — to perceive the distribution of opinion in the anonymous social environment, negative sanctions from this source could be countered by positive sanctions from reference groups which think the same (20).

Early studies of the dominant influence of opinion leaders and social relations over that of the mass media initially seem to support this objection (21). Some authors also consider perceptions of the environment to be shaped by reference groups and deny the possibility of developing relatively precise notions of the distribution of opinion in “public” (22). These objections generally fail to consider, however, that opinion leaders and reference groups are both subject to the dynamics of the climate of opinion and the mass media. Thus the effect opinion leaders and reference groups have, largely constitute the indirect effects of the media and the climate of opinion.

Noelle-Neumann’s theory is based on the fear of isolation. This is a motive which accounts for constant observation of the environment as well as for the willingness to speak up or the tendency to keep silent depending upon what is perceived to be majority or minority. Arguing against this basic theorem of the spiral of silence, theory critics point out that the individual’s selfish interests cannot generally be equated with conformity to the group or the community (23). The individual acts in line with a cost-benefit calculation, with positive sanctions to be anticipated tallied up against negative sanctions and eventually resulting in conformist or non-conformist behaviour, depending on the sit-

uation (24). In addition, the objection is made that conformist behaviour may be accounted for by something other than the fear of isolation cited by Noelle-Neumann. Thus, for example, attraction to or identification with persons or groups may have the same effect (25). Finally, the converse objection is made that the individual may respond to fear of isolation in other ways, rather than by conformist behaviour which takes the form of “silence”. E.g. Noetzel cites aggression as an alternative mode of behaviour.

- ad 3: Salmon and Kline particularly emphasise the role of personality characteristics in behaviour in social situations, denying the existence of a general tendency to avoid being isolated from others. As proof they introduce Crutchfield’s findings, according to which the willingness to conform to the group depends on intelligence, leadership qualities, authoritarian attitudes, educational methods and other variables (27).
- ad 4: Several authors note a contradiction between the “quasi-statistical sense” claimed by Noelle-Neumann and theories positing systematic distortions in social perceptions. Studies on “pluralistic ignorance” are cited, according to which the individual perceives his environment through the prism of his own opinion (“looking-glass theory”). The critics claim that the congruence between the actual distribution of opinion and the estimates of the public are due to the aggregate data which Noelle-Neumann uses in her analyses. On the individual level, however, these perceptions would be biased towards the individual’s own opinion, these distortions being counterbalanced in sum (28).
- ad 5: The role of the mass media in Noelle-Neumann’s concept is also criticised based on findings from other studies or on other theories. The following arguments are emphasised: people’s bonds with their respective reference group determines their media behaviour and even when they have been convinced by media content in the short run, they will later adjust or adapt to group norms (29). Some critics also question whether the mass media play any part at all in transmitting ideas about majority and minority opinion. The fact that many people are mistaken about others; views would refute Noelle-

Neumann's claim (30). Finally, there is doubt as to whether media content contributes to rapid social change. Several studies, in the view of some authors, tend to support an integrating function of the media which places sanctions on deviations from the norm, especially in the local sphere (31).

Although most of the arguments presented here are based on empirical investigations, they often fail to speak to the essence of the theory. They try to refute the overall concept of relations between variables in the theory of the spiral of silence by pointing to other variables not contained in it or to other effects of the variables contained in it. Noelle-Neumann's concept, however, does not claim that there are exclusive and deterministic relations between variables, instead trying to explain findings which are not explained by traditional theories by new variables or connections between variables. The new paradigm of effects research essentially shaped and propagated by her (32), which makes the strong effect of the media appear extremely probable and designs investigations and methods accordingly, has sometimes been interpreted to mean that she considers her theory an alternative to other approaches in the area of public opinion and media effect. If the goal of social science theories is to describe the proportion of individual variables within a multiple process of causality as accurately as possible, some parts of the theory or some chains of causality can definitely contradict other findings without these contradictory findings falsifying each other. The complexity of the subject studied by the research in communication and social behaviour actually suggests that different theories will compete for the variance to be explained (33).

E Empirical verifiability of the spiral of silence theory

The different components of Noelle-Neumann's theory described at the beginning of this section constitute related effects involving the social psychological, mass media and macro-sociological dimensions. Up to the present there has not been any investigation which has empirically tested the entire causal chain described by Noelle-Neumann. An investigation such as this would presumably come to nothing due to limitations of practice, methodology and time. Empirical findings available up to now have therefore only provided information about the individual links in the causal

process. In addition, investigative findings which were arrived at in other theoretical contexts, in which "competing variables" essential to the concept of the spiral of silence may not have been taken into consideration, are sometimes included as empirical proof. One example would be Asch's experiments on conformity in social situations (34) or findings from reference group research which are often cited by the critics.

As far as we know, there as to date been no study simultaneously investigating the mass media, the anonymous public and reference groups with a view to their respective effect on perceptions of the environment, fear of isolation, the willingness to speak up or changes in attitude. Since the influence of each variable has been proven separately, however, future work will consider the effect in the context of the particular situation involved. This approach should address the methodological problem presented by the fact that opinion leaders and reference groups respond to the public and the mass media, disseminating impressions and arguments derived from these sources. What may at first glance appear to represent the influence of social reference groups, may actually be the indirect effect of the climate of opinion and/or the mass media.

It has been empirically confirmed that people have the ability to perceive the distribution of and changes in opinion in their social environment. Noelle-Neumann provides examples of this from the political sphere, showing that even limited ups and downs in preference for one party or another are registered by the "quasi-statistical sense" (35). Salmon and Kline's objection that this may involve a projection of one's own opinion onto the environment in line with the looking-glass theory has been refuted by Noelle-Neumann, who has shown that changes in perceptions of the climate of opinion occur in the same direction among supporters of the different parties (36).

The thesis that the mass media are the sources for perceiving the environment has also been solidly confirmed. Thus persons who frequently watched political television programmes during the 1976 election campaign in the Federal Republic of German had different expectations as to who would win the election than persons who rarely or never watched such programmes. The distribution based on a panel survey of barely 500 persons was maintained even when possible intervention variables — such as political interest — were kept

constant (37). The test of the theory of the spiral of silence conducted by Glynn and McLeod in the US also resulted in different perceptions of the environment, depending on which media the respondents used (38). Recent findings comparing persons who watch a lot of television with those who do not, in fact showed a more far-reaching connection between the use of the media and opinion on new and controversial political topics. According to this, television viewers had a completely different impression of the legitimacy of a minister's decision in a political conflict than people who rarely or never watched television. This connection remained constant regardless of the party favoured by the respondent (39). Findings from the Federal Republic of Germany and of Austria show that even the tendency to support a particular party was influenced by television exposure (40).

There are many empirical findings which speak for Noelle-Neumann's hypothesis of the different "self-confidence" of opinion groups who believe that current or future majority opinion is on their side. D.G. Taylor determined that the "certainty factor" for winning as opposed to losing opinion groups is completely different (41). A representative survey of the population of the state of North Carolina showed that one opinion group in a moral and political conflict (abortion) appeared much stronger than it really was at the time of the survey both according to the way the current distribution of opinion was viewed and according to the view of which opinion will dominate "in one year". This is the perception of both the supporters of this opinion and the supporters of the opposite position. In addition, this view is consistently found in different social groups, which makes it extremely unlikely that the perception of the environmental climate depends on bonds with reference groups only. These empirical findings again could not have been explained by other theories (42).

Findings about the respective willingness to speak up or to keep silent characterising persons who belong to the majority or minority group respectively are not as clear. There is a methodological problem which makes it difficult to arrive at a clear picture: The "train test" used by Noelle-Neumann for surveys in the Federal Republic (a quasi-public, anonymous communication situation which the respondents are familiar with and which can be simulated in the interview) and the test of "willingness to speak up", of taking a public stand on your opinion, have to be adapted to the cultural

situation when the hypothesis is tested in other countries. This has not always occurred with a view to the elements essential to the social psychological forces whose effect is to be tested (43). Using as their indicator one's voting intention in a group of "friends and acquaintances", Glynn and McLeod found weak confirmation (44); using as his indicator donating money for a cause in public, Taylor found confirmation in ten out of twelve cases (45); using as their indicator speaking at a student meeting, Whitney and Lashin found confirmation for two of their four topics (46); Donsbach and Stevenson found that the "winning opinion group" was more willing to state its opinion in a car pool when the persons involved thought they were in the (future) majority (48). If we take into consideration that some of the studies failed to regard important conditions of the theory or created unfavourable test situations based on their methodological operationalisation, their choice of indicators or the kind of test persons chosen (49), the number of confirmations generally demonstrates the empirical success of the concept.

Tests of the theory of the spiral of silence conducted in the state of North Carolina illustrate its potential for discriminant validity. The debate about prohibiting abortion by means of an amendment to the American constitution was chosen as a morally loaded controversial topic. Two opinion groups were contrasted for purposes of additional analysis: Persons who support such an amendment and persons who reject it. The two groups were compared on the basis of their perception of what others think, their expectation as to which group would increase and which would decrease and their willingness to speak up. This analysis resulted in at least four findings which could not be explained by existing theories: 1. The supporters of one view (supporters of the amendment) are far more inclined to believe that the majority is on their side now and will continue to be than the group of those taking the other view, although they definitely represent a minority at the time of the survey. 2. Although there is a clear evidence of behaviour in line with the looking-glass theory, because the supporters of one view most often believe that their view represents majority opinion, whether in relative or absolute terms, this "looking-glass" is broken again by a different strength with which this pattern occurs in the two groups. 3. There are no differences in perceptions of which view has more supporters in public by population strata and geo-

graphical regions, so that reference groups evidently do not have an influence here. 4. Supporters of the view which is obviously "on the winning side" in public opinion, who also subjectively consider themselves the future majority, are definitely more willing to speak up than supporters of the view which is obviously "losing" (50).

F Further developments in the theory of the spiral of silence

Noelle-Neumann's theory of public opinion has met with great interest in international communication research, especially in the United States. This is shown by the many empirical investigations which test the validity of the hypotheses in other cultures. Despite the many criticisms of the theory and of the interpretations of the empirical findings presented by the author, it is generally recognized that the theory represents real progress in interpreting social psychological phenomena. Its decisive contribution to communication research consists of having focused attention on strong media effects again, thus replacing the traditional stimulus-response approaches, which as a rule are short-sighted. In his overview of the status of media effects research, W. Schulz includes this approach among the "ecological and dynamic points of view", which are mainly distinguished from other approaches by the inclusion of the "time" factor. He states that there are thus essentially three time-related factors which this kind of effects research takes into consideration: The nature of communication as a process, the long-term nature of media effects and the permanent interaction and interdependence of the factors involved (51).

The theory's potential as a macro-approach, including a variety of variables and the time factor, makes it open to attack by critics. The problems of constructing investigative designs which do justice to the theory's complex approach have already been pointed out. Future research connected with the theory of the spiral of silence should focus on two areas: 1. Clarification of the respective effect of the mass media, the anonymous public and reference groups on the perceptions of how others think and on fear of isolation and 2. Clarification of the sociological and psychological components of the climate of opinion.

The individual's bonds with reference groups, which compete with the mass media and the public as influential factors, have been one of the main points of criticism in the theoretical debate about Noelle-Neumann's theory. Yet there are to date no

investigations which consider these variables in relation to one another. The only instance of an attempt such as this is a study by Harm t'Hart in the Netherlands who found that when persons taking opposite viewpoints showed differing amounts of willingness to speak up, this tendency to keep silent was increased if their friends (reference group) took a different view from their own (52).

Carol Glynn's study is more specifically designed to address the problem described above. In a survey she conducted in the American university town of Madison, Wisconsin, the sample was designed so as to represent clusters of neighbourhoods. The respondents were asked about their opinion on two problems at the national, federal, local and "neighbourhood" levels respectively. They were then asked to state what they thought their neighbours' thinking and that of the other inhabitants of Madison was on this subject. For four out of six topics (53) the respondents' judgement as to what the neighbours and the population of the city in general thought differed, that is, they made distinctions between how others thought on controversial topics. In addition, it was shown that the view of the majority opinion held by neighbours differed from one neighbourhood to another, while the view of the majority opinion of the general city population did not. Finally, there was less variation in responses to the question as to how others think than in responses to questions about one's own opinion. Overall, Glynn's findings suggest that people are definitely able to make distinctions between different social environments when considering how others think (willingness to speak was not investigated here as a consequence of how opinion in the environment is perceived) and that their perceptions represent more than mere "projections" of their own opinion or methodological artefacts based on random responses (54). But this study does not provide a satisfactory operationalisation of the influences of reference groups either.

A representative survey by Mohn in Syracuse, New York, determined the views the respondents developed of majority opinion and of media tenor. Here again there was evidence of the ability to differentiate in observing others: A distinction was made between which view dominated among others and which view dominated in the media on "the political mood of the nation" and the death penalty. An analysis of the willingness to speak up, depending upon whether the individual felt in the majority or in the minority compared with the tenor

of the media or with general opinion, did not result in clear findings. In addition to the problem that the study cannot claim to be representative of the total population, the sample is too small as a rule to draw reliable conclusions which can be generalised, in view of the many controlled variables (own opinion, source of judging other opinion, notion of belonging to the majority or the minority). This is a problem most studies of this kind have, however, something which is to be attributed to the complex nature of the approach (55). Thus the problem of operationalising the individual's different "communication spaces" as well as quantifying and qualifying them as to their effect continues to represent an important challenge if the concept is to be clarified.

The second problem which future research must focus on, is measuring the prevalent climate of opinion. In their criticism, Salmon and Kline criticized Noelle-Neumann for only having presented one table in her work in which the respondents' willingness to speak up was broken down according to their subjective conviction of belonging to the majority or the minority group. They claimed that this made it impossible to tell whether the fear of isolation felt by the individual had actually resulted in a different willingness to speak up or whether this might be attributed to other factors which Noelle-Neumann had not tested (56). In fact, the data presented by the author contrasts either actual majority and minority opinion or opinion which the population assumes to be winning or losing. The individual's subjective feeling, which is the only thing that can create fear of isolation and its effect (on the willingness to speak up) is thus not present as an independent variable at all.

Evidently the two procedures of comparison — according to the individual's subjective feeling and according to the objective strength of the different sides using climate of opinion indicators — are based on different variables. The first procedure is "psychological", since it is based on the individual and his or her experience of the environment, while the second is "sociological", since it is based on quasi-groups (opinion groups) which show a common pattern of behaviour. Although only the "psychological" procedure can serve as an indi-

cator of individual fear of isolation, the fact that social aggregates or quasi-groups also differ in their willingness to speak up, suggests that an additional social psychological force is at work here. Thus aggregating only those who feel in the majority or the minority respectively, independently or whether they belong to the winning or losing group "objectively" would be an inadequate approximation of reality. In addition, there are empirical indications that when the individual responds that he thinks he is on the side of the minority, this may often represent a consistent personality characteristics ("sense of being in the avant-garde") which is independent of the actual perception of other's opinion.

The "main hypothesis", that fear of isolation is first of all based on individual perception, thus needs to be expanded to include variables of the objective climate of opinion and of personality. This would explain why the willingness to speak up among the group that is losing in the climate of opinion is as a rule more limited when the members of this group believe subjectively/individually that they are in the majority. Willingness to speak up would then be a sure indication of changes in public opinion because it would show an increase in one opinion and a decrease in the other more quickly than would views of what others think. This connection, however, is hypothetical at present, requiring further clarification.

In addition to this internal clarification on the theory, its integration with other theories and its application to other scholarly areas promises to yield interesting findings. Edelstein has related the "spiral of silence" to the decision-making concept (57) and Taylor has related it to the theories of collective action (58). The influence of the climate of opinion on legislation and the law is being debated increasingly (59), as is, in the field of economics, the light which Noelle-Neumann's theory may cast on individual economic processes (60). But even as regards communication research, the theory's potential for elucidating processes of media effect is far from exhausted; conversely, the theory itself needs to be further clarified in theoretical and conceptual terms and to be subjected to empirical confirmation.

Footnotes

- 1 The author has used the concept of the "spiral of silence" herself as a title in several publications, thus legitimising the terms used for the concept. See NOELLE-NEUMANN, E.: *The Spiral of Silence. A Theory of Public Opinion*. In: *Journal of Communication* vol. 24 (1974), No. 2, pp. 43-51 as well as NOELLE-NEUMANN, E.: *Die Schweige-spirale. Öffentliche Meinung — unsere soziale Haut*. Munich/Zürich 1980; (paperback edition: Frankfurt/Main, Vienna, Berlin 1982; engl. edition: *The Spiral of Silence. Public Opinion — Our Social Skin*. Chicago 1984).
- 2 On the role of the method in NOELLE-NEUMANN's concept, see: Noelle-Neumann, E.: *Die Schweigespirale*, 1980, p. 52f, p. 65f.
- 3 See ASCH, E.: *Effects of Group Pressure upon the Modification and Distortion of Judgements*. In: Guetzkow, H. (ed.): *Groups, Leadership, and Men*. Pittsburgh 1951; MILGRAM, S.: *Nationality and Conformity*. In: *Scientific American* vol. 205 (1961), pp. 45-51.
- 4 The main theses of the theory of the spiral of silence listed here are taken from several publications by NOELLE-NEUMANN. The various editions of her book "The Spiral of Silence" contain detailed presentations of the theory (see footnote 1).
- 5 NOELLE-NEUMANN, E.: *The Spiral of Silence. Public Opinion — Our Social Skin*. Chicago 1984, p. 178.
- 6 As an example of a comprehensive approach, see HABERMAS, J.: *Theorie des kommunikativen Handelns*. 2 vols., Frankfurt/Main 1981.
- 7 See LAMP, E.: *Öffentlichkeit als Bewusstsein in der alttestamentarischen Lebensordnung*. Master's thesis Mainz 1983; RAFFEL, M.: *Der Schöpfer des Begriffs "Öffentliche Meinung": Michel de Montaigne*. In: *Publizistik* vol. 29 (1984), pp. 49-62; ECKERT, W.: *Zur öffentlichen Meinung bei Machiavelli — Mensch, Masse und die Macht der Meinung*. Master's thesis Mainz 1986.
- 8 In a synopsis, H. CHILDS found 50 different definitions of public opinion. See CHILDS, H.: *Public Opinion. Nature, Formation, and Role*. Princeton 1965, pp. 14-26; in his article about public opinion in the *International Encyclopedia of the Social Sciences*, W. PH. DAVISON came to the conclusion that there is no generally accepted definition of the concept: see Public Opinion. In: SILLS, D.L. (ed.): *International Encyclopedia of the Social Sciences*, vol. XIII, New York, pp. 188-197; NOELLE-NEUMANN was guided by the principle that the persistent existence of concepts represents an indicator for an as yet unsolved problem which the concept refers to. See KEPPLINGER, H.M.: *Probleme der Begriffsbildung in den Sozialwissenschaften: Begriff und Gegenstand Öffentliche Meinung*. In: *Kölner Zeitschrift für Soziologie und Sozialpsychologie* vol. 29 (1977), pp. 233-260 as well as LUHMANN, N.: *Öffentliche Meinung*. In: LUHMANN, N.: *Aufsätze zur Soziologie von Politik und Verwaltung*. Köln, Opladen 1971, pp. 9-34.
- 9 On the question of the legitimacy of the power of journalists see also DONSBACH, W.: *Legitimationsprobleme des Journalismus*. Freiburg, Munich 1982.
- 10 See NOELLE-NEUMANN, E.: *Der Konflikt zwischen Wirkungsforschung und Journalismus. Ein wissenschaftsgeschichtliches Kapitel*. In: *Publizistik* vol. 27 (1982), pp. 114-128. Engl.: *The Effect of Media on Media Effects Research*. In: *Journal of Communication* vol. 33 (1983), No. 3, pp. 157-165.
- 11 NOELLE-NEUMANN's theory of the spiral of silence played a considerable role, for example, in the CDU design of its election campaign for the 1976 elections. On the criticism of the political utilisation of findings see NOETZEL, D.: *Über einige Bedeutungen des Erwerbs politisch-ideologischer Deutungsmuster*. In: D. OBERNDÖRFER (ed.): *Wählerverhalten in der Bundesrepublik Deutschland*. Berlin 1978, pp. 215-263; MERTEN, K.: *Wirkungen der Medien im Wahlkampf. Fakten oder Artefakte?* In: SCHULZ, W., K. SCHÖNBACH (eds.): *Massenmedien und Wahlen. Mass Media and Elections: International Research Perspectives*. Munich 1983, pp. 424-441; KATZ, E.: *Publicity and Pluralistic Ignorance: Notes on the Spiral of Silence*. In: BAIER, H., H.M. KEPPLINGER, K. REUMANN (eds.): *Öffentliche Meinung und sozialer Wandel — Public Opinion and Social Change*. For Elisabeth Noelle-Neumann. Opladen 1981, pp. 28-38.
- 12 NOELLE-NEUMANN has specified these conditions in a variety of publications. The decisive factors, however, are discussed in her early

- publications. See *The Spiral of Silence*, 1974; as the most recent publication on this topic, see NOELLE-NEUMANN, E.: *The Spiral of Silence. A Response*. In: SANDERS, K.R., L.L. KAID, D. NIMMO (eds.): *Political Communication Yearbook 1984*, Carbondale, Edwardsville 1985, pp. 66-94.
- 13 See NOETZEL, D.: 1978, p. 238.
 - 14 See for example NOELLE-NEUMANN, E.: 1985, p. 77ff.
 - 15 See for example NOELLE-NEUMANN, E.: *Turbulences in the Climate of Opinion. Methodological Applications of the Spiral of Silence Theory*. In: *Public Opinion Quarterly* vol. 41 (1977), pp. 113-151.
 - 16 NOELLE-NEUMANN emphasises that the process of public opinion she describes also exists in totalitarian countries but that the individual elements are weighted differently there, based on different concepts of civil rights and freedom of the press. On public opinion in totalitarian countries, see also WIRL, M.: *Die Öffentliche Meinung in den SD-Berichten über die Stimmung und Haltung der Bevölkerung im Dritten Reich*. Master's thesis Mainz 1986.
 - 17 See NOELLE-NEUMANN, E.: 1985, p. 67.
 - 18 See the contribution by MERTEN 1983, which is very polemical within a scholarly framework. A somewhat more moderate and productive contribution by the same author: *Some Silence in the Spiral of Silence*. In: SANDERS, K.R., L.L. KAID, D. NIMMO (eds.): 1985, pp. 31-42.
 - 19 See NOETZEL: 1979; SALMON, Ch. T., FG. KLINE: *The Spiral of Silence Ten Years Later. An Examination and Evaluation*. In: SANDERS, K.R., L.L. KAID, D. NIMMO (eds.): 1985, pp. 3-30; GLYNN, C.J., J.M. MCLEOD: *Implications of the Spiral of Silence Theory for Communication and Public Opinion-Research*. In: SANDERS, K.R., L.L. KAID, D. NIMMO (eds.): 1985, pp. 43-65.
 - 20 See GLYNN, C.J., J.M. MCLEOD: 1985, p. 61. There are frequent references to the experiment by ASCH, in which an additional person supporting the person in the experiment was able to neutralise conformity with the majority which made the wrong judgement, see ASCH, S.E.: 1951; KATZ, E.: 1981, p. 29 and SALMON, C.T.: 1985, p. 7f.
 - 21 On this subject see especially the election study by LAZARDFELD, P.F., B. BERELSON, H. GAUDET: *The People's Choice*, New York 1948 and KATZ, E., P.F. LAZARDFELD: *Personal Influence*. Glencoe 1955.
 - 22 See NOETZEL, D.: 1979, p. 238, SALMON, C.T., FG. KLINE: 1985, p. 10f, and GLYNN, C.J., J.M. MCLEOD: 1985, p. 51ff.
 - 23 See KATZ, E.: 1981, p. 31.
 - 24 See Taylor, D.G.: *Pluralistic Ignorance and the Spiral of Silence: A Formal Analysis*. In: *Public Opinion Quarterly* vol. 46 (1982), pp. 311-335, p. 333.
 - 25 SALMON and KLINE here base themselves on studies by NEWCOMB, Th. M.: *An Approach to the Study of Communicative Acts*. In: *Psychological Review* vol. 60 (1953), pp. 393-404 and MCLEOD, J.M., S.H. CHAFFEE: *Interpersonal Approaches to Communication Research*. The bandwagon effect is also cited as an example of conformist behaviour not based on fear of isolation. See SALMON, Ch. T., FG. KLINE: 1985, p. 9f.
 - 26 See NOETZEL, D.: 1979.
 - 27 See CRUTCHFIELD, R.A.: *Conformity and Character*. In: *American Psychologist* vol. 10 (1955), pp. 191-198.
 - 28 See FIELDS, J.M., H. SCHUMANN: *Public Beliefs About the Beliefs of the Public*. In: *Public Opinion Quarterly* vol. 40 (1976), pp. 427-448; O'GORMAN, H.J., S.L. GARRY: *Pluralistic Ignorance — A Replication and Extension*. In: *Public Opinion Quarterly* vol. 40 (1976), pp. 449-458; TAYLOR, D.G.: 1982; SALMON, C.T., FG. KLINE: 1985, p. 13.
 - 29 See GLYNN, C.J., J.M. MCLEOD: 1985, p. 65, SALMON, C.T., FG. KLINE: 1985, p. 65.
 - 30 SALMON, C.T., FG. KLINE: 1985, p. 65.
 - 31 See KATZ, E.: 1981, p. 31.
 - 32 See her programmatic essay: "Return to the Concept of Powerful Mass Media". In: *Studies of Broadcasting* vol. 9 (1973), p. 67-112 which Denis MCQUAIL considers one of the turning points in the history of media effects research. See *Mass Communication Theory. An Introduction*. London 1983, p. 177f.
 - 33 See DONSBACH, W., R.L. STEVENSON: *Herausforderungen, Probleme und empirische Evidenzen der Theorie der Schweigespirale*. In: *Publizistik* vol. 30 (1985).
 - 34 This, for example, results in ASCH's experiments being introduced both by NOELLE-NEUMANN (in support of her theory) and by her critics. See SALMON, C.T., FG. KLINE: 1985.

- 35 See NOELLE-NEUMANN, E.: 1980, 1982.
- 36 See NOELLE-NEUMANN, E.: 1985, p. 72f.
- 37 See NOELLE-NEUMANN, E.: Das doppelte Meinungsklima. Der Einfluss des Fernsehens im Wahljahr 1976. In: Politische Vierteljahresschrift vol. 18 (1977), p. 408-451.
- 38 See GLYNN, C.J.; J.M. MCLEOD: Public Opinion du Jour: An Examination of the Spiral of Silence. In: Public Opinion Quarterly vol. 48 (1984), pp. 731-740.
- 39 See NOELLE-NEUMANN, E.: Theorie und Methode. In: MAHLE, W.A. (ed.) Fortschritte der Medienwirkungsforschung? Berlin 1985, pp. 51-61.
- 40 Ibid. and NOELLE-NEUMANN, E.: Der Einfluss des Fernsehens auf die Wahlentscheidung. In: Media Perspektiven No. 10/1982, pp. 609-617.
- 41 TAYLOR, D.G.: 1982.
- 42 See DONSBACH, W., R.L. STEVENSON: 1985.
- 43 Ibid. A new indicator question used by NOELLE-NEUMANN to stimulate public situations can obviously be used in different cultures without creating problems: "Assuming you are on a five-hour bus trip and you stop along the way for a rest stop and everyone gets out for a break. People start talking in a group and someone says that he is completely for/against . . . Would you like to talk to this person or would you prefer not to?"
- 44 See GLYNN, C.J., J.M. MCLEOD: Public Opinion du Jour, 1984.
- 45 See TAYLOR, D.G.: 1982.
- 46 See WHITNEY, D.C., Y.A.A. LASHIN: The Limited Effects of Spirals of Silence: Some Kinds of Expressions of Opinion, for some Publics, for some Issues, for some Kinds of Routine Patterns of Communication. Paper presented to the Political Communication Division, International Communication Association, San Francisco 1984.
- 47 See DONSBACH, W., R.L. STEVENSON: 1985.
- 48 See MOHN, E.L.: Testing the Spiral of Silence Theory. Paper presented to the Ninth Annual WAPOR Conference, Chicago 1983.
- 49 WHITNEY and LASHIN used students exclusively as the subjects of their study. We may assume that these test persons are basically more willing to speak up, for a variety of reasons, than is true of the average population.
- 50 This finding only applies if the individual's subjective judgement of having the majority on his side in the future is the criterion chosen. This corresponds to NOELLE-NEUMANN's hypothesis that the way future is viewed is a better predictor than the way the environment is viewed currently. On the findings see DONSBACH, W., R.L. STEVENSON: 1984.
- 51 See SCHULZ, W.: Ausblick am Ende des Holzweges? Eine Übersicht über die Ansätze der neuen Wirkungsforschung. In: Publizistik vol. 27 (1982), pp. 49-73, p. 61.
- 52 See THART, H.: People's Perceptions of Public Opinions. Paper presented to the International Society of Political Psychology, Mannheim 1981.
- 53 The respondents were not asked about the opinion of all the citizens of Madison when topics relating to the neighbourhood were involved, thus there are only six comparisons involved here.
- 54 See GLYNN, C.J.: Alternative Conceptions of Public Opinion. In: Public Opinion Quarterly.
- 55 See MOHN, E.L.: 1984.
- 56 See also the "Certainty-factor" by TAYLOR, G.E.: 1982.
- 57 See EDELSTEIN, A.: Continuing the Search for Validity in Public Opinion About Social Problems and Social Decision-Making. In: BAIER, H., H.M. KEPPLINGER, K. REUMANN (eds.): Öffentliche Meinung und sozialer Wandel. Opladen 1981, pp. 50-63.
- 58 See TAYLOR, D.G.: Public Opinion and Collective Action. Chicago 1986.
- 59 ROELLECKE, G.: Zum Einfluss der öffentlichen Meinung auf die Rechtsanwendung. In: BAIER, H., H.M. KEPPLINGER, K. REUMANN (eds.): 1981, pp. 71-85.
- 60 See JÖHR, W.A.: Elisabeth Noelle-Neumann's Schweigensspirale aus der Sicht eines Nationalökonom. In: BAIER, H., H.M. KEPPLINGER, K. REUMANN (eds.): 1981, p. 12-27.