Information Privacy in Hungary

Survey report and analysis

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Introduction

The issues of privacy and information privacy have not yet come into the limelight in Hungary or in other formerly socialist countries, neither in politics nor in public opinion, nor in scientific research. Before the Second World War, these countries had not yet reached the point of clarification of this information-balance, whereas the development induced by modern information and communication technologies began in the 1950s and 1960s when these countries were no longer able to deal with these phenomena of western democracies. Differing cultural and social traditions go along with this, as does moreover the deficiency in the very concept of privacy.

The investigation presented in this report is the first in its area in Hungary and, as far as we know, also in Eastern Europe. Although the data collected in the survey can be regarded as a snapshot taken in a period of rapid change, we believe that the investigation is suitable for drawing some general conclusions about the society's sensitivity to privacy, its data protection consciousness and its desire for information autonomy.

Unfortunately, because of curtailment of budgets in the public research sectors this investigation could not be repeated, nor could we conduct a similar investigation. On this topic, an investigation was carried out about the aspects of information privacy in the press, from which we can only deduce the directions of change.

The source of the data is a survey conducted at the end of 1989 by the Hungarian Institute for Public Opinion Research, for a nation-wide representative sample of 1000 persons, on behalf of the State Office for Population Registering. Following particular international standards and some elements of an investigation carried out in the previous year, we tried to broaden this investigation to a general investigation on privacy. This report gives a summary of the most important analyses and the conclusions drawn from them in the original Hungarian-language final report, taking into account the changes over the time elapsed since then. The report, however, does not include the following elements: first, the description of the work done before the survey, such as the preparation and evaluation of in-depth interviews as well as the results of the test survey and the modifications to the questionnaire carried out on the basis of these results; second, it does not include the detailed discussion of methodical issues such as the coding and analysis of the answers given to the open questions; third, it does not include the international comparisons presented in the original closing study, based on the results of several significant Western investigations.

The chapters of the report were written by the three researchers who directed the investigation. The first part offers an overview of the sample and the reliability of the data; the second part examines the hypothesised relationships between opinions and expectations. The third part contains the detailed analysis, and the fourth part extends the analysis of relationships to individual results of a survey conducted a year before. The last part of the report summarises the main conclusions to be drawn from the analysis of the data. We attach the survey questionnaire in the appendix.

A. Characteristics of the investigation

The sample

Data collection took place between October 20 and 27, 1989, with the cooperation of the Hungarian Public Opinion Research Institute's country-wide network of interviewers. We present the composition of the nation-wide representative sample of 1000 persons according to four major demographical variables.

Our final sample is not the initial sample given to the interviewers in the form of address lists, but the sample of those actually interviewed. The proportions presented below refer to this actually interviewed sample. In the rather numerous cases in which the interviewer failed to find a person at the prescribed address who met the requirements of the sample, he/she (under certain prescribed conditions) used a supplementary address. Comparison of the modifications to the initial sample and to the actual composition of the population according to variables serving as basis for the sample yields an estimate of the representativeness of the sample. Composition of the sample according to place of residence shows that inhabitants of 66 settlements represent the population of the country: besides Budapest, residents of 22 other towns and 43 villages.

*Composition of the sample according to place of residence**

Inhabitants of Budapest	20.3%
Inhabitants of provincial towns	41.3%
Inhabitants of villages	38.4%

*The system of public administration in Hungary changed somewhat since the date of data collection. Certain villages were promoted to town status, while others merged or separated. The characteristics of the sample naturally reflect the situation at the time the sample was taken.

Composition of the sample according to educational level

Less than 8 years of elementary school	17.5%
Elementary school	21.8%
Vocational school	24.0%
Secondary school	24.6%
University or polytechnic	12.0%

As to age, the sample represents only the adult Hungarian population.

Shares of age groups in the sample

Young people between 18 and 33	29.4%
Middle-aged people between 34 and 49	32.0%
Older people between 50 and 65	22.8%
Elderly people 66 and over	15.8%

Shares of males and females

Males	47.2%
Females	52.8%

The following data characterize the implementation of the survey:

Across the country 153 interviewers conducted the survey, questioning 4–18 respondents each. Fifteen instructors in Budapest directed their work. Seven persons coded the questionnaires and prepared them for computerised data processing.

After the interviews, the interviewers evaluated the information obtained from the individual respondents for the questionnaire as a whole. On the basis of this evaluation, 18.5 per cent of the completed questionnaires proved to be particularly rich in information. In these questionnaires various comments, characteristic personal opinions and qualitative answers to the open questions were to be found.

Reliability of the data

When presenting the results of the investigation, we report the data mostly as percentage distributions of the sample or of groups that represent characteristic standpoints on particular issues. We have sometimes provided percentages to one decimal place. Of course, in absolute terms these figures are not so accurate. Their statistical nature means that their accuracy has to be interpreted within certain limits. Statistical error limits of the data originate from the sampling procedure, distortions in the sample during the survey (e.g. the selected person was not found at home even after several attempts, or moved, or died, etc.), or in some other factors.

We must also reckon with further uncertainty factors in any investigation that includes opinion research and applies sociological methods. These result from the interconnections between the subject investigated and what the people are interested in (e.g.: to what extent is the subject in the forefront of public interest, how do the mass media deal with it, etc.). The conceptualisation of the questionnaire and the respondents' problems of interpretation, questions of language use or understanding and their consequences in the responses could also cause systematic distortions. These sources of errors are subjects of special methodical investigations, and their reduction or interpretation of the deviations they cause are integral parts of every investigation. Inaccuracies in coding and data input also represent sources of error, which we attempted to reduce by monitoring the codes and running computer programs to analyse logical interdependencies.

With all these factors taken into account, we reckon with a practical error limit of about 3 per cent in the interpretation of our data. Regarding our sample, this means that a group of 30 persons, though near to the error limit, could still be analysed. This figure, however, can be regarded as an average. For example, in the brief comparison with a survey from a year earlier, it is possible to interpret the data only with rather higher error limits and levels of uncertainty.

In the utilisation of the results, these methodological considerations mean that the data should be regarded as statistical ones, with all their advantages and disadvantages. Every investigation of a sociological nature includes compromises in delineating the particular subject, in the accuracy of data collection, in the survey, and in regard to the time and resources required. The results of our investigation, bearing in mind this sort of background, present reliable benchmarks concerning fully-formed or still-evolving, latent or even non-existent public views in connection with the issues analysed.

B. Opinions, expectations and societal factors

Communication and public opinion

We began the questionaire with a few general questions about the information level of the general public in order to obtain a picture about the consumption of news and about everyday communication. The first questions, just as in our other investigations, referred to listening to the radio program "168 hours" (a weekly political "magazine" on public issues) and watching the TV news. Of the respondents, 45 per cent regularly listened to the above-mentioned radio program, 8 per cent occasionally and 47 per cent never; 56 per cent regularly watch the TV news, 38 per cent occasionally and 6 per cent never. In general, the higher the social status of the respondent (i.e. a higher educational level, a more highly-qualified job, residence in a larger community, and at an earlier age a more quickly accumulated stock of material and human capital), the higher his level of news consumption. It must be noted, however, that the share of TV news viewers is lower among middle-aged people, which can be explained by their being busier and by their pursuit of money.

To be able to decide to what extent the answers received in the survey represent public opinion, we must also take into consideration whether people talk about issues referring to our topic at all. Therefore, beyond the consumption of information in general, we also measured the level of information exchange within the environment and, in particular, in three areas and on three stages of personal information. "Do you usually talk about administrative bodies in general?" Fifty-five per cent talk about this topic in their families, 56 per cent with friends and acquaintances and 49 per cent in the workplace. Answers tended toward "yes" as status rose. Within that, those living in Budapest talk about administrative bodies more often than average in the workplace. Eighty-seven per cent talk about their own personal problems in their families, 62 per cent with friends and acquaintances and 36 per cent at work. How much others know about them is discussed by 36 per cent within the family, 32 per cent with friends and acquaintances, and 20 per cent on the job. In this issue, the share of yes-answers among those with only eight years of elementary school or living in villages is above the average.

Thus, communication intensifies with increasing intimacy, while discussions with more distant circles become more intensive as status increases. People with lower status talk more often about personal matters, and those with higher status more often have discussions about more remote institutions and administrative bodies.

Offices, bureaus, institutions

One of the basic issues in the questions concerned people's opinions about the activities, legitimacy and trustworthiness of administrative bodies and about the official handling of their personal data. Apart from a few "radical" young intellectuals, an overwhelming majority of people (87 per cent) always supply the personal data required by administrative bodies. Yet 21 per cent of the respondents said that the official procedure

was sometimes burdensome and annoying for them. The motives for this can be classified roughly into three groups: for older people and for those with lower status, it is disturbing to have to write a lot on each occasion, and the questions are complicated. At the other end of the scale, high-status intellectuals are disturbed that the official body knows their data. Respondents (mainly young and middle-aged) belonging to the middle classes are aggrieved because the official administration handles people too bureaucratically, or they do not trust administrative bodies.

Of the respondents, 61 per cent think it desirable that, when an administrative body wants personal information, it should always have to request the data from them, and that the data should be used only by that particular body, while 22 per cent think it permissible for administrative bodies to exchange their personal data with each other. Residents of Budapest, young and middle-aged people, skilled workers, entrepreneurs and white-collar workers mainly represent the former view, while the young political cadre of provincial towns represent the latter. The remaining 17 per cent cannot decide or are indifferent to this issue; these are low status people, villagers, and the elderly.

This last social stratum hardly knows anything about the fate of its data. On the basis of another question, 58 per cent of the respondents argue that they know sufficient—or exactly nothing—about the fate of their data. The remaining 42 per cent would like to know what happens to their data and how they will be used. Typically over-represented in this group are the young, highly-qualified political cadre of provincial towns, but the highest status persons and middle-class entrepreneurs also belong to this category. The young provincial political cadre, for example, want to know on the basis of which laws or regulations the data are requested from them. High-status persons attach importance, also as a matter of principle, to whether the provision of data is voluntary or compulsory, while entrepreneurs, manual workers, and the intellectual middle classes consider it important for what purpose their data are requested, where and to what kind of official bodies their data go, and what advantage or harm to them might stem from the provision of data.

Sixteen per cent of the respondents essentially could not decide, when answering the question, which they consider a better solution: that data be stored in a centralised data bank or that each data type be registered only with the relevant administrative body. The remaining 84 per cent opted fifty-fifty for these two alternatives. Higher-status persons sided with centralised registration, the middle classes with the "individualist" choice. Again, those who gave no answer characteristically came from among those with the lowest status. Primarily those belonging to the intermediate strata said they were interested in whether their data would be used with or without their names (47 per cent), but roughly a third of them did not believe that the data supplied without names would not finally be used with names. The remaining respondents were indifferent to this issue. We must, however, point out that in the opinion of 90 per cent of the respondents, it is in the peoples' interest that data registration be precise, and only 6 per cent (tipically young high-status entrepreneurs) said that it was precisely inaccurate and incomplete data registration that was in the peoples' interest.

The ÁNH and the data

We first asked respondents which kinds of data they thought were registered about them in official institutions. Higher-status persons either listed in detail so-called "dry data" (name, sex, mother's name, date and

place of birth, residence data, death data, educational level, occupation, skills, working place, citizenship, family status, origin and eye colour; 70 per cent of the data given were such), or they simply said "everything" (10 per cent).

Mentioning data of the following types was typical of respondents from the intermediate strata: social situation, medical history (25 per cent), political views, membership in political organizations (11 per cent), financial data (wealth, income, property, foreign currencies, etc., 25 per cent), police data (criminal record, military data, moral data. 16 per cent). The respondents named 4–5 kinds of data in average.

The purpose of the next question was to discover whether the respondents agreed with the introduction of the personal identification number. A mere 3 per cent did not know what the personal identification number was, and three-fourths of the respondents agreed with its introduction. According to the respondents, the personal identification number serves the following objectives: all-embracing registration (12 per cent), identification and control (53 per cent), easier registration (23 per cent), and certain parts of some answers referred to computerisation as well (10 per cent). Two-thirds of the respondents had heard about the State Office for Population Registering (ÁNH). According to them, this institution dealt with registration of so-called dry data (25 per cent of the answers included such elements), and with the organisation of censuses and the preparation of statistics (31 per cent); there were also tautological answers (13 per cent): "with registration of population data". It can generally be said that more explicit answers went with higher status; that the intermediate strata often gave specific responses and, within that, answers relating to the subject of business enterprises. Practically no one raised objections to the current data registration activity of the ÁNH. An overwhelming majority (86 per cent) approved of the activities of the ÁNH. We should emphasize, however, that 14 per cent disapproved of registration of data on educational level, 46 per cent on family relations and 53 per cent opposed access by the ÁNH to other registrations. Five per cent of the respondents (mostly young intellectuals with higher status) were entirely against the operation of the ÁNH.

Two-thirds of the respondents agreed with the idea that they should be able to check on their data registered by the ÁNH, and, if necessary, to correct them. Ninety per cent of the respondents opposed the ÁNH's giving out registered data to anyone or for any purpose other than official or scientific purposes. Thus, any market ideas of the ÁNH, based on some possible utilisations of these data by others—either for a fee or free of charge—would meet the opposition of almost 100 per cent of the population.

The only exception may be the case when the citizen, of his own free will, personally, and in his own personal interest, would ask the State Office for Population Registering for personal services (e.g. to organise a reunion of former school-mates). Half of the respondents would make use of this service and would even be willing to pay for it.

The national registration of population data is free of charge. To the question of how much they would be willing to pay annually for the precise registration of their personal data in an official institution if they had to pay for it themselves, 17 per cent of the respondents gave no answer, 48 per cent said "nothing", and the remaining 35 per cent would pay, on average, HUF 240. (This 35 per cent came typically from the youngest age groups.)

We also asked that in their opinion, how much did it cost the ÁNH per year to keep the computerised registration of one person. Of the respondents, 54 per cent did not answer, and the average estimate of the remaining 46 per cent amounted to HUF 10,926.

From the foregoing, we may draw the conclusion that people do not question the legitimacy of data-collection and registration activities of administrative bodies, and do not voice a clear mistrust of these bodies.

Nevertheless, there are some very important differences in people's attitudes in connection with the activities of these bodies.

We first have to establish whether the low-status social strata are either entirely indifferent or insensitive to data registration, or do they simply find it unpleasant to fill out forms or to meet other official obligations (which is "merely" a technical issue) or rather do they take a position of "well, they know everything anyway."

The intermediate strata have different attitudes. In their case we find differently expressed doubts in connection with the authorities' and official bodies' possession of data. They are particularly sensitive concerning the fate of any data—and in my opinion this is the decisive motivation—connected with their business activities and business opportunities. This emerges from (a) their considering precisely the tax office and bill collectors "unfair", (b) that they are definitely interested in the destiny of the data collected about them, (c) that they raise definite objections to centralisation of data collected by individual administrative bodies, and (d) that they are absolutely not indifferent whether their data are collected and stored with or without their names. Their main point is thus in essence the securing of freedom of enterprise.

Attitudes of high-status persons are even more distinct from a "general" indifference. Their standpoint can be best expressed as one of mistrust. This becomes evident from their being the best-informed on the state of registered data (in Question 5 they often hypothesised even data referring to political affiliation as well), but they are also decidedly of the view that administrative bodies should not act as if they were superior institutions. That is, according to them administrative bodies are not authorities placed above people, but rather organisations established to serve people. It is especially important to them what happens to their data or what they are used for, that provision of data be voluntary, not compulsory. Among the "radical young people" who think similarly to those having high status, it even sometimes happens that they simply do not provide their data. All this indicates that these social strata take a definite stand on the issue of the protection of personal information rights and freedoms.

Finally, it can be stated that three-fourths of the total sample consider a separate law necessary to regulate the rights and obligations with respect to people's personal data.

C. Detailed analysis

Consistency analysis

An important point during the construction of the questionnaire was to be able to draw conclusions about how well-formed and consistent opinions are and how stable are attitudes. We have a basis for such conclusions primarily in two statement blocks in which some of the statements have a counterpart that reflects, on a certain level, contradictory opinions or attitudes. From the very nature of these questions, they are not traditional "control questions", and the contradictory statement pairs are also not complete contradictions. In some cases they include some "slips" in their content, and in others a sort of "appendix", e.g. a banal cliché is attached to one of the elements within the pairs. Nonetheless we consider that in each of these statement pairs there is a common core that helps to verify the maturity of opinions and attitudes, and that from the analysis of several such pairs taken together, we may draw conclusions regarding the topic under investigation which apply to the entire sample.

In the following, we examine answers to eight question or statement pairs which contain contradictions. In the statement block of Q. 12, 23.1 per cent of the respondents agreed with both statements 1 and 4, i.e., they thought that in general various official bodies wanted to know too much about people, but they also thought that these bodies should know even more so that certain people could not "fish in troubled waters". Some 28.2 per cent expressed somewhat contradictory opinions in personal matters as well; they agreed with both statements 2 and 3: They have nothing to hide, and reveal everything about themselves; still they are upset that official bodies want to know everything about them. An even higher share (38.4 per cent) agreed with both statements 8 and 12: In this case, however, the contradiction implied in the statements is somewhat milder. Here we consider it essential whether the mechanism of data processing or the operation of data processing institutions is transparent or not for the people whose data are handled. The case is similar for statements 7 and 11. The share agreeing with both was 18.9 per cent. Within this statement pair, both a projection emphasizing trust (and advantageous association), and one suggesting distrust in being registered, play a role.

In the similar statement block of Q. 15, 26.9 per cent of the respondents agreed with both statements 1 and 4, with which they assessed computerised office work as here rather easily grasped, but there puzzling. Also, 29.4 per cent agreed with both statements 6 and 8, thereby making contradictory declarations on the issue of "numbering people", i.e. in a typical *motif* of informational self-determination. Moreover, 33.8 per cent agreed with both statements 3 and 5; thus giving both a fundamentally positive and also a fundamentally negative assessment of computerised processing of their personal data.

Although we have examined the share of agreement with statement pairs that contain contradictions, we should note here that, psychologically, it is easier to agree than to disagree. We will return to this assumed effect in the analysis below.

The last statement pair mentioned above actually examines the issue of "safety versus comfort" from the point of view of the subjects disclosing their personal data. This basic issue also appears in the problem of "centralised versus decentralised registra-

tion"; it is therefore a significant factor in Q. 11 as well as 16. Both questions offer alternatives in the issue of centralisation vs. decentralisation of data processing. In Q. 11, the subject had to make a choice from his own point of view, while in Q. 16 he/she could express his/her general opinion. Since there was a choice between two alternatives in both questions rather than an expression of agreement or disagreement, the "cross-chosen" and thus contradictory cases have been examined. Inconsistent answers were given by 25.1 per cent of respondents: (a) if an official body is interested in their data, it should have to request them explicitly and only it should be allowed to use these data, yet (b) these respondents also thought that the data of all citizens should be centrally registered. In the converse case, 8.3 per cent said their data should be exchanged among official bodies, but also that these bodies should collect data individually, and only those data which are pertinent to them.

On the basis of the above, answers containing contradictions represent, on average, 25–30 per cent of valid answers in the cases mentioned. As the next step, we examine the cumulative frequency of such inconsistent opinions.

From the above-mentioned statement pairs, we have selected the 12/1–12/4, 12/2–12/3, 12/8–12/12, 12/7–12/11, 15/1–15/4 and 15/6–15/8, as bearing typical kernels of contradiction. In all, 722 respondents, nearly three-fourths of the whole sample, fell into at least one of those "traps". This of course does not mean that on the basis of this questionnaire, the opinions of three-fourths of the people are not to be taken seriously, since several external factors could raise the number of these cases: e.g., it is easier to agree than disagree; the respondent may be inattentive or uncooperative; the statement pairs do not represent diametric contradictions.

After the pairwise occurrences, we examined also the multiple occurrences. Here we used four pairs of statements as filters: 12/1–12/4, 12/8–12/12, 12/7–12/11 and 15/6–15/8. We found 35 cases in the entire sample (3.5 per cent) in which respondents made contradictory statements in all four statement pairs.

We may conclude from the above that since in the assessment of individual responses the uncertainty factor is relatively high, the statements should be analysed together rather than separately. A proper choice of multivariate statistical methods can largely eliminate the effect of this factor. On the other hand, for most cases in the sample, inconsistent opinions do occur but the number of "consistently contradictory" opinions is negligible.

Analysis of the combined question-blocks

In the following, we examine in detail those questions in which respondents had to express an opinion on a series of issues. We include Q. 4, in which the inviolability of private life had to be placed among several important social issues; Q. 8, which concerns the sensitivity of certain personal data; Q. 9, where we examine the invasion of privacy and, within that, of information privacy; Q. 12, which presented general statements in connection with official bodies and registration; Q. 15, in which we listed statements in connection with computerised registration; Q. 21, in which respondents were asked to rank the official bodies that process data according to their fairness in handling these data; and, finally, Q. 23.1, which refers to the evaluation of data registered by the State Office for Population Registering (ÁNH).

In Question-block 4, we listed issues considered socially important. Respondents were asked about the significance of each issue, and in each instance gave their answers on a five-point scale. Here both general issues (such as unemployment,

retirement pensions, freedom of speech, equal rights for women, social security and the general economic situation) as well as issues arising from the current political situation (the multiparty system, workers' power, the case of Roumanian refugees, private enterprises) played a role.

Of course, in the turbulent period since the survey, the social timeliness of these issues has undergone considerable change, both in general and in their interrelationships. It was not, however, the social assessment of individual issues that was the fundamental concern of the investigation.

The purpose of this block was to learn where the respondents placed inviolability of the private sphere within the rank ordering of these issues (point 3). This block also includes our only question referring to the other principal domain of direct civil information rights, the freedom of information (point 6).

Figure 1. illustrates the distribution of answers for the various issues. The structure of a particular column-group reflects the breakdown of the scores on one particular issue. Among the issues, several typically different groups can immediately be identified on the basis of the distribution of the scores given. The first group consists of a single issue, how to improve the difficult economic situation. Here the vast majority put it in the "highest importance" category: 92.5 per cent scored it 5, 5 per cent scored it 4, while ranks 3, 2 and 1 did not even reach the 1 per cent level. To the second group belong the issues of unemployment, retirement pensions, private life, freedom of speech, freedom of information and social security. In these issues, 68–80 per cent scored 5, i.e. a two-thirds to four-fifths majority; 10–15 per cent scored 4, around 10 per cent scored 3, and taken together 1–5 per cent scored 2 and 1. Thus the respondents regard the issues included in this equally-distributed group as "very important", without making any sharp distinctions among them. We can point out that the

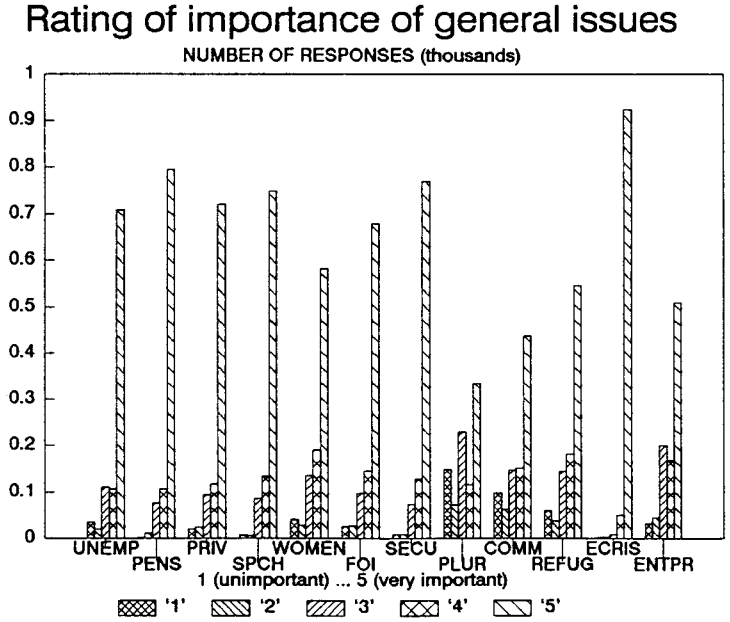

Figure 1

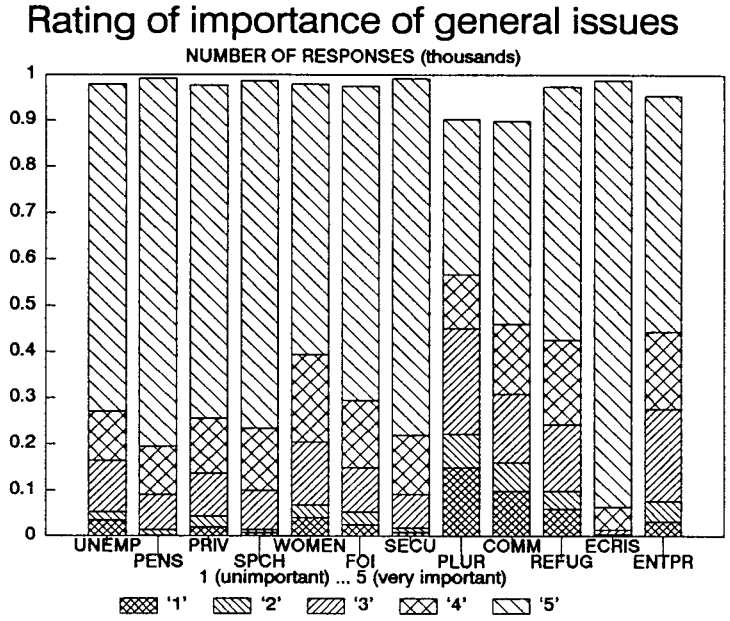

Figure 2

evaluation of the aspects of privacy and freedom of information also belongs to this group.

In the remaining group, the lower frequency of category 5 is rather striking at first glance, but, within this group we may observe two types on the basis of the distribution of answers. Only 55–58 per cent regarded the issues of equal rights for women and of the Roumanian refugees as "very important", while 18–19 per cent ranked them as "important" and 13–14 per cent as "moderately important", and below that, 7–10 per cent. Assessment of the freedom of private enterprises shows a similar distribution, yet we regard this issue as belonging to the final type, on the one hand because of a lower share of usable answers, and on the other, because of the distribution of scores. While in the case of the previous issues the step-like structure of rankings within the particular column-groups suggests that the scales incline towards the upper end, in the case of private enterprises score 3 is more frequent than score 4. Polarisation of opinions is most obvious in the case of the multiparty system: the majority of scores 1, 3 and 5 over scores 2 and 4 allows the observer to conclude that respondents do not merely regard this issue important "as a matter of approval" but rather that some of them regard it as only moderately important or even not at all important. For this issue, the share of score 5 amounts to only one-third, that of 3 is nearly one-fourth as is also that of scores under 3. The question concerning the issue of preserving workers' power also belongs here: the share of score 5 is 45.7 per cent and that of those under 3, 16.8 per cent.

Thus the issues of the multiparty system, workers' power and private enterprises visibly divide the sample. It should be also noted that, for these three issues, the number of usable answers is lower, and the number refused or missing for other reasons is therefore greater. When the number of scores given for each question is illustrated in a joint column, shares of the numbers of usable answers can be observed along with the internal proportions. *(Figure 2).*

Given that we had no opportunity since

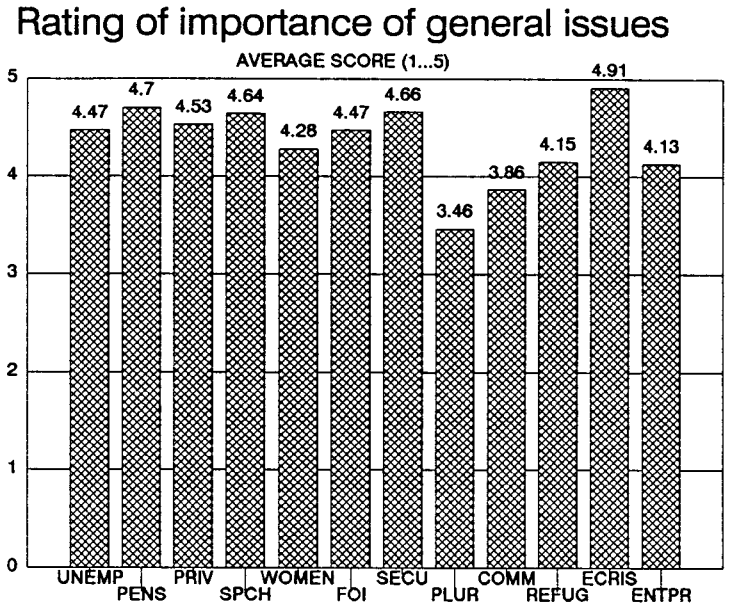

Figure 3

the time of the survey to measure the public assessment of the importance of privacy and freedom of information anew, we can only assume that these issues represent relatively more stable points in the changing system of social values and perceptions in public opinion following the political changes.

We have also examined the relative ranking of importance of the individual issues. Average rankings calculated from the scores on the individual issues *(Figure 3)* produced the following ordering of the issues:

Economic crisis	4.91
Retirement pensions	4.70
Social security	4.66
Freedom of speech	4.64
Privacy	4.53
Freedom of information	4.47
Unemployment	4.47
Equal rights for women	4.28
Roumanian refugees	4.15
Private enterprises	4.13
Workers' power	3.86
Multiparty system	3.46

This ranking also shows that both privacy and freedom of information with the average figures of about 4.5 can be found somewhere in the mid-range of issues definitely considered important. Moreover, on the basis of the foregoing they belong to a category in which opinions are not polarised. In the ranking, they are squeezed in after the issues of economic crisis, retirement pensions, social security and freedom of speech, next to the issue of unemployment, and ahead of the issues of equal rights to women and the Roumanian refugees as well as the three issues that divided the respondents, i.e. private enterprises, workers' power and the multiparty system.

Question-block 8 is directed towards investigating the sensitivity of certain personal data and information. The question was the following: *"Would you personally object or not object if the following data about you were made publicly accessible to anybody?"* Here we offered only two possibilities for an answer, and the interviewer was not allowed to suggest an "it depends..." type answer. The data and information types listed included "dry" registration data, data that are traditionally regarded as personal and widely used, in-

formation on family life and personal finances, and autobiographical information similar to that registered by party officials in the former communist regime.

The distribution of the answers is summarised in *Figure 4*. Since there was no question for which the share of the "it depends"-answers exceeded 5 per cent, only the categories "would object" and "would not object" were included in the figure.

As can be seen in the figure, at the upper end of the sensitivity scale, the numbers of objectors and non-objectors are roughly similar, while at the lower end the share of non-objectors shows an overall majority for certain types of data and information. Given the negligible share of "it depends"-answers, the remaining two answers can be regarded as a complementary pair, therefore either of them is sufficient to evaluate sensitivity.

The table below shows the percentage shares of those who would object to making public the types of data and information listed in the questionnaire. We rank the particular issues in descending order of the number of objectors, so the table can be regarded as a sort of sensitivity scale:

Family life	50.4 %
Personal finances	49.2 %
Medical history	47.5 %
Address	39.1 %
Income	36.7 %
Plans for the future	36.6 %
Personal identification number	34.1 %
Past records of the personal life	32.8 %
Telephone number	30.7 %
Religious belief	22.1 %
Political views	19.3 %
Age	14.9 %
Origin	14.4 %
Educational level	13.3 %
Occupation	9.9 %

Relatively the most sensitive issues are family life, personal finances and medical history. Half the sample would object to making such data public. Thirty to forty per cent would object to making public data on address, income, future plans, personal identity number, past history and telephone number; one-fifth to revealing religious or political affiliation. Age, origin, education and occupation belong to the relatively most indifferent kinds of personal information, with a share of 10–15 per cent.

We next examined whether sensitivity of

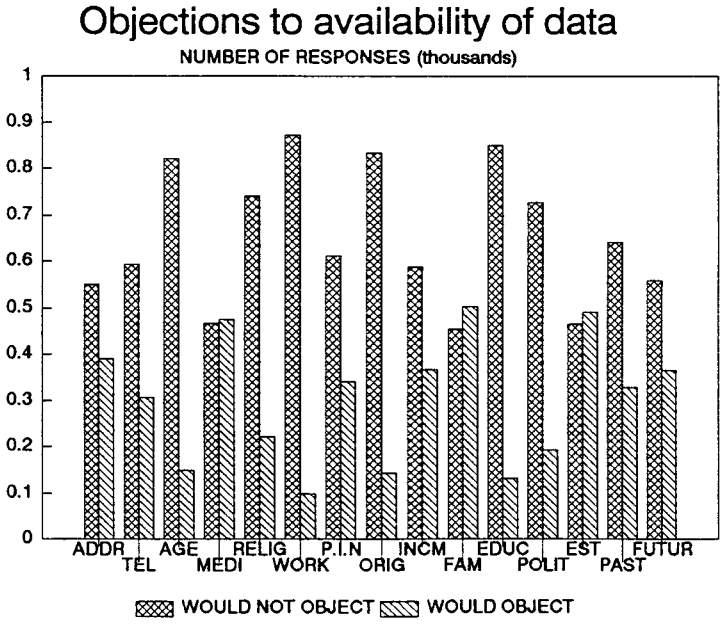

Figure 4

certain data and information types could be related to the distribution of the sample according to age-group, place of residence and educational level. We are primarily concerned with how, for each question, the shares of the "objectors" in the sub-groups selected on the basis of the foregoing factors related to the corresponding shares for the sample as a whole.

We found age-related sensitivity in the cases of medical history, income, finances, family life, personal past and future plans. Of those over 66, 10–20 per cent fewer objected, and the figure for future plans is a bare half of the share of objecters in the whole sample. The elderly age-group's lesser demand for information privacy is a general observation: Elderly people, especially single ones, have to rely on other people's help and on medical and social services more intensively than in previous periods of their lives. For all of this they have to give more information about themselves and to disclose an increasing number of dimensions of their private lives. To this is added their generally reduced incomes, and beyond a certain degree they are compelled to draw attention to this fact; they also have fewer plans for the future. Going beyond this, a general relationship between age and information-sensitivity could be identified for the majority of data types listed: sensitivity is highest at a young age, and gradually decreases with age. This is understandable from the point of view of young active people at the beginning of their careers: in this period of life there is a greater need for informational self-determination in the foregoing issues.

Selection impact of the place of residence is observable only in the case of address and, to a lesser extent, of telephone number and income. In these cases, the share of answers that reflect objection to making data public is higher for the inhabitants of Budapest than for rural residents, but the difference does not exceed 10 per cent of the whole sample. When evaluating this variation, the characteristic communication peculiarities of the big city and the smaller communities must be taken into consideration. In smaller communities, where interests, mutual dependencies and networks of information channels are connected much more closely, insuring information privacy is difficult and not always necessary; where the information itself may be judged by different standards, personal information may more easily become of public interest.

In a first approximation to the role of educational level, those who have completed less than eight years shows lesser sensitivity. Apart from certain generally more indifferent (low objections) data types, this group raised fewer objections to the whole range of issues of making personal data and information public. In the case of family life, the share of objections from this group to making data public was scarcely half that found in the sample as a whole. The lower data protection sensitivity of the less-educated can be attributed (a) to a lower privacy level of their family life and community life, and (b) also to the fact that they supposedly have less official business that would require data disclosure. In addition, they have a less complete picture of the mechanisms of information processing and use.

The lower share of objections by those with less than eight years of education is offset by a markedly higher share of those who graduated from secondary school, concerning medical history, personal past, future plans and, partly, address; and in the case of income and finances, also of those with post-secondary education. Thus, in the case of the information types here listed, the sensitivity of these population groups can be regarded as being higher.

Finally, the method of cluster analysis was applied to decide whether, in addition to the above, it would be possible to identify further characteristic groups on the basis of the

structure of their answer-series, and if so, what characterized their answers.

Three rather large groups were identified. Their shares within the total sample account for 33.8 per cent, 30 per cent and 24.8 per cent, respectively. In the following, these groups are referred to as SENS/A, SENS/B and SENS/C.

Cluster SENS/A has the profile of a very wide sensitivity scale, with information on financial situation, family life and medical history at the upper end, and on occupation, origin and educational level at the lower end. Thus, on the basis of the questions asked, respondents belonging to this group generally have differentiated views about making personal data public. The main feature of cluster SENS/B is homogeneous insensitivity: in general, this group of respondents would not object to making public their personal data. Respondents of cluster SENS/C are characterized by a typically high sensitivity, which is, however, somewhat more differentiated than the insensitivity found in cluster SENS/B. In this case, financial situation, income, family life, medical history, past history and future plans stand at the head of the ranking.

Examining the inner structure of these three groups of respondents according to sex, age, educational level, position and place of residence, only small deviations were found in comparison with the structure of the whole sample. In cluster SENS/A, the share of rural population is somewhat higher, as is that of highly educated people, while the share of the least educated is somewhat lower. In cluster SENS/B, a slight majority of elderly people can be found. Also in this cluster, the share of higher-ranking professionals is a bit lower, while that of the groups comprising private entrepreneurs, unskilled and semi-skilled workers is slightly higher, but the difference, compared to the shares found in the whole sample, does not reach 10 per cent.

In group SENS/C, the youngest age-group has a slight majority at the expense of membership of the oldest generation, but the influence of age-related sensitivity is less than in group SENS/B.

Again, no significant differences were found in the answers to the privacy-question of Question-block 4, nor in the answers to the question referring to freedom of information in the same block; ditto for familiarity with the ÁNH and opinions about its activity. Of the members of group SENS/B, a few per cent less consider legal regulation necessary and a few per cent more agree with the central registration of personal data. In only one question related to data protection were there significant differences, in point 5 of Question-block 9. (*"Is your private life invaded or not invaded if data about you are collected by computer?"*) The distribution of the answers is the following:

	Invaded	Not invaded
Whole sample	26.6%	59.5%
SENS/A	31.2%	53.1%
SENS/B	9.7%	80.6%
SENS/C	44.9%	37.2%

These response ratios, however, are arranged along the dimension of sensitivity of personal data, and merely refer to the fact that sensitivity also extends to computerised registration.

With the help of Question-block 9, we hoped to determine, among all the possibilities which could potentially adversely affect the private sphere, to what extent the invasion of privacy narrowly conceived played a role. More exactly, we composed the questions in such a way that they all refer to the invasion of information privacy, but among them are some of a general nature and others with more specific data supply and data registration connections; within that, concerning anonymous vs. personally identifiable data.

Figure 5 illustrates the summarized distribution of the answers. Remarkably few

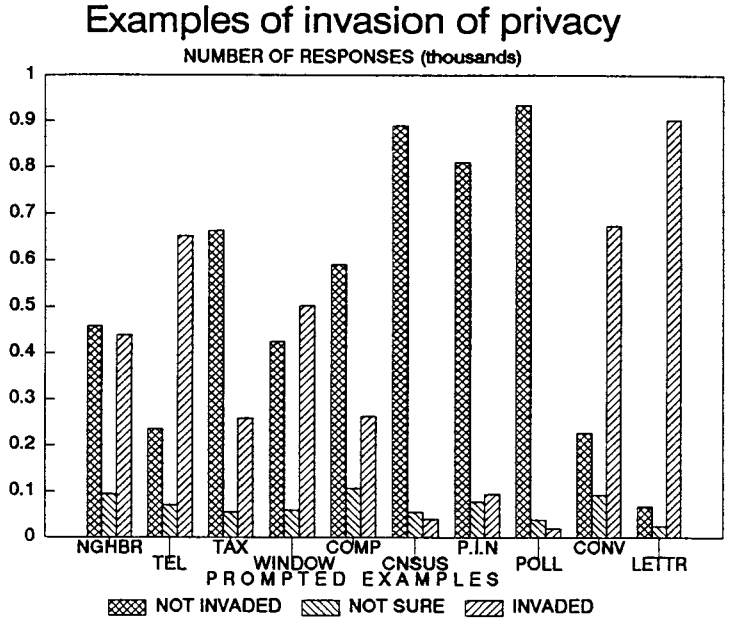

Figure 5

people feel their private lives invaded in the cases of censuses and public opinion research, and in similar measure in general for data provision when names and personal identification numbers must also be disclosed. At the opposite pole, the list of the invasion of the private sphere is topped by delivery of already opened letters, with a share of over 90 per cent, followed by monitoring of conversations or telephone calls, with a share of a two-thirds. Every second respondent feels invaded if his/her neighbours are curious or if people can see in through the window. One-fourth of the sample feel invaded if data are collected about them by computer or if taxation authorities check on their finances. The complete ranking of the shares of the private-life-invasion answers is the following:

Letters are received open	90.8%
Conversations are monitored	67.9%
Telephone calls are monitored	65.7%
People watch through the window	50.5%
Neighbours are curious to know about one's family life	44.1%
Computerized data collection	26.6%
Taxation authorities monitoring one's finances	26.2%
Personal data must be supplied together with name and personal identification number	9.5%
Census-takers ask for personal and family data	4.1%
Opinion researchers ask about one's views	2.0%

On the other hand, in the similar assessment of giving data with name and personal identification number to the census or public opinion research, we presume the combined effect of two factors: one is that collecting data for scientific or statistical purposes is considered harmless from the viewpoint of the private individual, the other is the confusion of the essence of anonymous and named, individually identifiable data and the lack of differentiation between these two data provision and registration types, with their divergent aims, uses, and effects. Here we should mention that in connection with Q. 17, half of the respondents stated that it concerned them whether data were used with or without names, but within this group there are roughly equal proportions of those who prefer supplying data with names, and

those who prefer anonymous provision of data, or who do not make any differentiation in this area at the time of data collection. Within this same group, the share of those who worry that data given without names will nevertheless be used with names is 36.8 per cent (17.2 per cent of the entire sample). All of these response rates suggest that in regard to named and anonymous data of a personal nature, opinions are in part unformed and in part reflect a lack of knowledge (a third of the entire sample—half of those giving usable answers—named the census as an activity of the ÁNH, while altogether only 31 persons mentioned the personal identification number in this connection).

In this question-block also we examined whether sensitivity to privacy issues showed any interdependence with age-group, place of residence, and level of education. The age-group-dependent sensitivity of privacy issues revealed in the previous block could here be traced from even more explicit signs: through the complete range of issues we find a near-linear relationship between age-group and the distribution of answers given for the individual points at issue, in which greater sensitivity is associated with the younger age-groups, and lesser with the older age-groups. The largest differences range around 20 per cent away from the average, in several cases only from 5–10 per cent, and occasionally under 5 per cent. We would not note these latter divergences individually, but they are in any case appreciable as a whole and in the tendency they reveal.

The effect of the place of residence is smaller, with its value of about 5 per cent being at the lower limit of discernibility, but again the totality and tendency of these deviations suggest that residents of Budapest are in general somewhat more sensitive to phenomena potentially adverse to their private lives than are those who live in villages; residents of provincial towns generally occupy an intermediate position from this point of view. We referred to the evaluation of this phenomenon in the discussion of the previous block.

The effect of level of education is also similar to the observations on sensitivity of personal data; here too the lower sensitivity of the group having less than eight years of elementary education is noticeable in the majority of the enumerated issues. There is no case of above-average sensitivity for this group, while insignificantly small negative deviations appear in the categories representing extremely small numbers of cases. Significant deviations are between 10 and 20 per cent compared to the average of the entire sample, and these show a reduction in the proportion of those who regard the phenomena in question as an invasion of privacy among the group with the least education.

The deviation from the average does not offset that for the greater sensitivity to privacy issues in the case of the more highly educated; compensating percentages are rather distributed among the groups with eight or more years of education. In a few cases the more highly educated category—even in the case where sensitivity increases in parallel with education—remains a few percentage points behind those with a secondary-school education in their sensitivity to privacy issues. Although these data do not give sufficient basis for precise conclusions, we may risk the assumption that the intellectuals' somewhat more insightful, more considered standpoints, with their easier acceptance of a balancing of opposing interests, play a role in this result. The sensitivity of the more highly educated is present to a more perceptible extent only in their assessment of computerised data collection; here the proportion of those who regard it as an invasion of privacy—compared to their share in the entire sample—is double that of the lowest educational group.

In Question-block 12 we asked for the

respondents' opinions about general statements connected with official bodies, registration of personal data, data processing and use. (*"I will now read you some statements. Please answer whether you agree or disagree with them."*) Among these statements there are some referring to the positive sides of data registration, some to the dangers; some that express trust or distrust, and some reflecting a position of indifference. (We have earlier covered the evaluation of contradictory statements.) The proportion of "it depends" type answers (not offered as a possible answer) ranged between 6–10 per cent in this block, the proportion of unusable answers typically around 5 per cent. The table below contains the percentage distribution of "agree" and "disagree" answers.

In the answers the share of agreement—with the significant exception of point 11 (the state taking care of things)—is always larger than the proportion of disagreements, if in varying amounts. Here we may assume the influence of lesser psychological resistance—it is generally easier to assent than to oppose. We can also attribute an agreement-increasing impact to the high-sounding, slogan-like phrases used. The highest proportion of agreement occurred in the case of statements expressing trust or mistrust (*"You can never know who might get ahold of the data," "I wonder what they use the data for," "You can never know when knowledge might be misused"*) as well as for the statements about *"unnecessary financial burden"* and *"I have nothing to hide."* The statement referring to the registration of personal data as a means of increasing state assistance drew the markedly lowest level of agreement.

Regarding the certain degree of inconsistency in opinions previously referred to, instead of a detailed interpretation of the percentage distribution of the agreement and disagreement, it seemed a better approach to try to identify, in the distribution of the answers, the impact of common background factors which could be interpreted according to the composition of this statement block. For this test we used factor analysis (based on principal component analysis) with Varimax rotation. With this method we were able to single out two factors, and, as a result of the rotation, we were able to arrive at a clear set of factor weights.

In the matrix statements 7, 12, 3, 9 and 10 have nearly identical weights in the

Statement	Agree (per cent)	Disagree (per cent)
1. Officials want to know too much about people	48.2	35.9
2. I have nothing to hide; I would disclose any data about myself	69.0	19.3
3. It is annoying that official bodies want to know everything about me	47.1	40.3
4. More data should be registered about people, so that certain people cannot "fish in troubled waters"	45.9	37.0
5. It makes no difference to me where and what kind of data they register about me	47.3	44.0
6. Registering so much data about people puts an unnecessary financial burden on the state	73.1	12.2
7. You can never know when knowledge about you might be misused	67.5	19.4
8. If an official body asks for data about me, I can always know what it's for	56.4	34.4
9. The more the state knows about people, the more it can influence them	61.8	23.0
10. I wonder what they use all those data about people for	69.2	21.0
11. The more places my data are registered the better, because this way the state can better look out for me	31.5	55.8
12. You can never know who might get ahold of the data that an official body collects about you	70.4	18.6

dimension of Factor I, and in Factor II the highest weights were received by statements 5, 2 and 11, again with nearly identical values. On the basis of the clear grouping of statements, we can regard Factor I as a sort of privacy- and data-protection dimension, and Factor II as a dimension of confidence and order.

If we describe the statements on the basis of their factor weights in the rotated matrix, in a two-dimensional space where the coordinates correspond to the dimensions of the two factors, the spatial positions of the statements illustrate very well their relationships with one another and with the two background factors. In *Figure 6*, we have circumscribed the two groups of statement symbols in which the individual statements can be regarded as convergent in both factor dimensions.The statement symbols cluster near the axes, showing that the impact of one of the two factors is predominant: large factor weights in one of the dimensions go together with small ones in the other, and vice versa. Further, we can also see that each of the 12 statements belongs in one or the other of these two characteristic groups.

If we examine the content of statements 5, 2, 11, 8 and 4 on the one hand, and that of 7, 12, 3, 9, 10, 6 and 1 on the other, we find a clear dividing line between the two groups: In accordance with the interpretation of the two decisive factors, trust and the desire for order are predominant in the first group, and concern for privacy, distrust, and data protection awareness in the second.

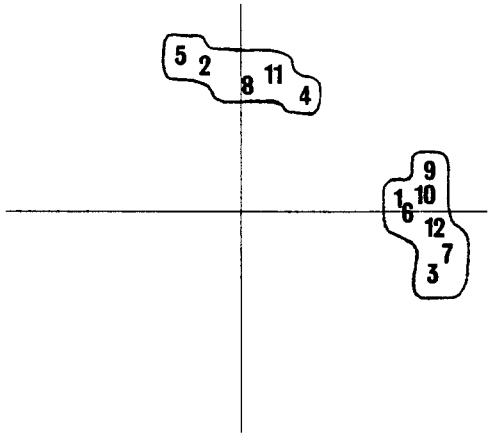

Figure 6

Beside the largest factor weights, the role of the smallest ones also deserves attention. In the dimension of privacy/data protection, the two lowest (negative) figures are paired with statements 2 and 5. In the spatial illustration, their symbols fall on the left side of the Y axis. It is easy to interpret that the data protection awareness and the concern for privacy must stand at the opposite pole from the statements "*It makes no difference...*" and "*I have nothing to hide...*". Similarly, statement 3 ("*It is annoying that administrative bodies want to know everything about me*") stands at the negative pole of the dimension of trust/order, the farthest below the X axis, as well as statement 7, which is similarly strong, but expresses distrust rather than anxiety ("*You can never know when knowledge about you might be misused*").

The foregoing suggests that in spite of the contradictions that appear in the answers, clearly interpretable background-factors influence the majority of respondents in their agreement or disagreement with the statements listed.

Question-block 15 is similar in purpose and structure to the block discussed above. In this case the number of statements is somewhat lower, and their common theme is–in contrast to block 12's theme of registration *in general*—computerized registration. ("*You surely know that nowadays data are being registered by computers in more and more places. I will now read a few statements about this subject. Please tell me whether or not you agree with these statements.*") The distribution of the answers can be observed in the table on the facing page.

In this case too, we can observe a majority share for agreeing responses, in spite of the contradictory contents of certain statement pairs (only for statement 8 is the distribution of responses approximately equal); again, we presume, ease of agreement plays a role.

	Agree (per cent)	Disagree (per cent)
1. Computerized administration is even less easy to comprehend than formerly	51.0	30.3
2. It makes no difference whether my matters are handled with computers or not because officials do what they want anyway	60.8	27.3
3. It is best if my data are collected by computer because then I don't have to run around to different places	72.9	11.7
4. With computers, people's affairs are always handled in a more organized and clearer fashion	59.1	17.3
5. If my data come together in one place from several computers, officials will be able to discover things about me which are none of their business	46.0	34.1
6. It is very good that everybody has a number of his own because in this way there is no disorder in the offices	69.4	19.2
7. If an administrative body has a computer, it can learn much more about people with it	61.6	20.3
8. People are not inventory items to be numbered	42.2	44.3

The greatest number agreed with statement 3, which emphasises a benefit of centralized data processing, namely that it results in a procedure more comfortable from the client's viewpoint. A similar majority indicated through their agreement that they consider order important in connection with administrative bodies, in exchange for which they are willing to subject themselves to certain administrative rules (statement 6). Statement 8 garnered the least agreement, which even so represents almost half of the respondents. (We note that statements 6 and 8 suggest contradictory opinions in a rather direct manner.) With this statement we refer to an internationally known aspect of the fight for information autonomy, to the protest against numbering people and handling them as soulless statistics, and against the symbol of information subjection, namely, the personal identification number.

To the analysis of the possible background-factors influencing the formation of opinions, we applied the method of factor analysis as for the previous block. Again in this case also we identified two factors, and the factor weights of the matrix obtained after rotation made possible a consistent interpretation of the two dimensions. In the dimension of Factor I, statements 4 and 3 appear with the highest and almost equal weights, while statement 6 also has a high value. In the dimension of Factor II, all four statements with high weights (1, 8, 2 and 5) represent quite similar values.

If we locate the statement symbols as before in the dimensions of the two factors on the basis of factor weights *(Figure 7)*, the compact clustering of the two encircled groups is striking. Since high weights on one side are offset by low ones on the complementary side, the two groups cluster around the X and Y axes. This closeness to the axes means that, for each particular statement, one of the factors is predominant, while the other plays a negligible role. The clear-cut bipolar location permits us to un-

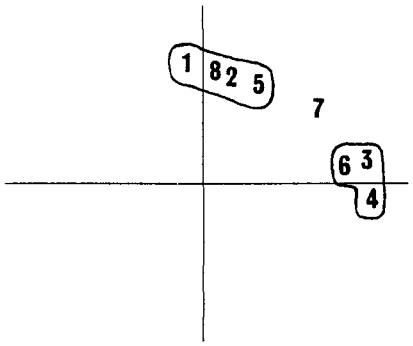

Figure 7

derline the advantages and dangers of the most important element of the related statements, i.e. computerised data processing, in the interpretation of the dimensions. We could therefore conceptually reduce the system of coordinates to a one-dimensional one, which has at one of its poles the "pro-computer" statements (4, 3 and 6) and, at the other, the "contra-computer" ones (1, 8, 2 and 5). In the end, this indicates that in the opinions of the sample, the advantages and dangers are clearly separated.

We should also deal with the as yet unmentioned statement 7, which is located as an island between the two encircled groups (at the "halfway point" between the two poles of the conceptually simplified coordinates), indicating that, in the assessment of this statement, both the advantages and the dangers of computerised registration play a role. The outlying position of statement 7 is a warning to the analyst: this statement may be interpreted in a positive and a negative way. We originally meant it to express the negative feeling (i.e. administrative bodies with computers can learn so much more about a subject that is only in the official interest, but not in the interest of the subject). It seems one half of the sample interpreted this positively (that is, that this extrainformation potential would be utilised in the subject's own interest).

In Q. 21 we examined the assessment of ten generally known potential data processing institutions, concerning the working of which–including the handling of personal data–the respondents could be assumed to have personal experience, or at least some idea.

Here we did not primarily ask respondents about a particular office, authority or institution; we were instead curious, as emerges from the composition of the questionnaire, about the general assessment of particular types of institutions, based naturally on the respondents' own experience (e.g., about local councils and local saving banks). We did not define the criteria of "fair" data processing, because we wanted to obtain opinions at the level ofattitudes and in the dimension of the subjects' general confidence, rather than on the basis of assessment of objective circumstances. (For the first time in the survey, ÁNH was mentioned among the listed institutions, and according to the logic of the questionnaire—which deals first with broad-ranging questions of privacy and data protection, and then advances to questions touching on the concrete activities of the ÁNH. So until this point we did not refer to the final user of their data, nor the objectives of the survey, so that their opinions would not be influenced by arousing any expectations; only after the first mention were they asked directly about the ÁNH, and in detail. From this point we went onto questions specifically mentioning the ÁNH, using the pretext of the first mention of it.)

In the preliminary test-questionnaire, this question required respondents to rank all ten institutions with the help of cards. Since in the middle or "neutral" range of the scale, the ranking caused difficulties, or was not performed, we therefore simplified the requirement and asked the subjects only for clear-cut assessments in the form of a ranking into positive and negative "top choices", making the response easier. Accordingly, we do not rank the institutions on the basis of some average point score, but take the positive and negative assessments together, so that we can identify not only "fair", "unfair", and "indifferent" data processing institutions on the basis of the responses, but also conflicting assessments.

In *Figure 8* we see the assessment-shares of the ten selected institutions in a summarised form. We also distinguished answers coded with 0 for those who for example could not decide or could not perform the task since their ratio was above 10 per cent in all cases. Code 1 signifies classification of the particular institute into the group of "the

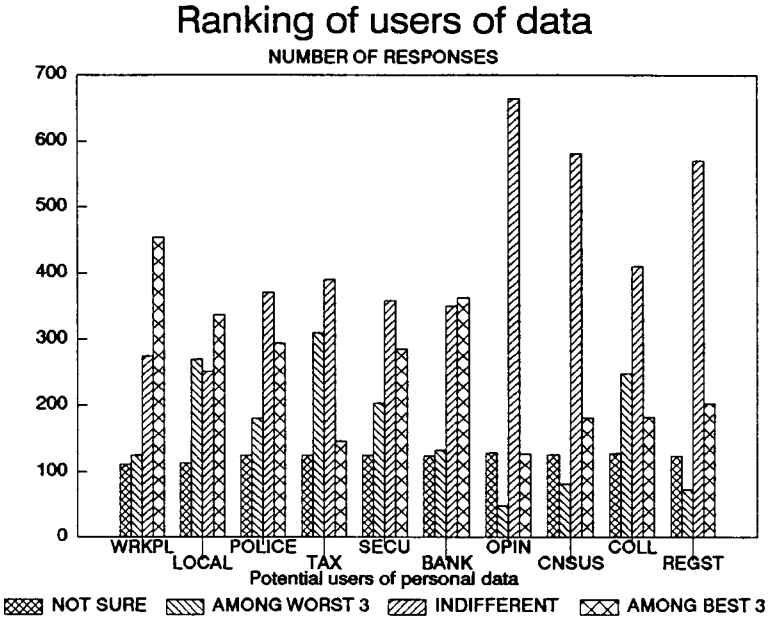

Figure 8

three least fair" institutions, code 3 means a classification into "the three fairest" ones, and code 2 that the respondent did not classify the particular institution at all. Thus, the columns corresponding to the individual institutions illustrate (according to the shadings in the legend) the shares of these types of responses.

It is striking in the diagram that we find neither obviously "fair" nor obviously "unfair" institutions. One principal type of response is "indifferent", where the column of code 2 is much higher than those of the others. In the other main type, two or three values occur with almost equal frequency.

Predominantly indifferent assessment was given to public opinion research, the census and the ÁNH. The proportions of the respondents not classifying them anywhere (code 2) were 68.5 per cent, 59.8 per cent and 58.8 per cent respectively; the decrease was balanced mainly by an increasing share of "fair" responses: 13.1 per cent, 18.7 per cent and, in the case of the ÁNH, 20.9 per cent (along with 7.5 per cent "unfair" assessments). Assessment of bill collectors and of the tax office shows similarities: though the non-classifying responses are in a majority, the share of negative assessment is higher than that of positive assessment. For the tax office, the difference is more than double.

In the case of the National Savings Bank or the Savings Cooperatives (the two predominant financial institutions dealing with personal savings at the time of the survey), the shares of indifferent and positive assessments are nearly identical, while in the case of the National Health Service and the Police, alongside the predominance of indifference, an approximately 10 per cent excess of positive over negative may be observed. The lowest share of indifferent assessment (25.9 per cent) is found for local councils together with a slight preponderance of positive assessments; for the workplace, on the other hand, the proportion of "fair" rankings is higher than that of "unfair" and "not classified anywhere" taken together. The workplace received the highest share of "fair" classifications (47 per cent), the tax office the lowest (15 per cent). The highest

share of "unfair" assessments (31.9 per cent) went to the tax office; the lowest to public opinion research (5.1 per cent).

Thus, on the basis of these response rates, the most positive picture developed about data processing activities in the workplace and data handling at the National Savings Bank and Savings Cooperatives, the most negative about the tax office and bill collectors. In the assessment of the ÁNH, indifference predominated; in the remaining responses positive assessment was more emphasized.

In Question-block 23.1, we listed the types of personal data registered in the ÁNH, and for each type asked respondents whether or not they approved of the ÁNH's registering of that particular data type. ("*Now I will list for you the data types that the ÁNH registers centrally for each Hungarian citizen. Please tell me for each one whether you approve or disapprove.*")

In this block, the overall majority of the answers expressed agreement for every data type. Only in two cases, temporary address and registering the data of deceased persons, did the share of agreement among the valid answers decrease to 85 per cent. For all other cases, it fell in the range of 91–98 per cent. It is worth noting that one third of the sample did not answer the questions of this block, just as in the case of Q. 23 ("*What do you think the State Office for Population Registering deals with?*"), for which the share of valid answers was also only two-thirds. Homogeneity of the valid answers was also indicated by the fact that—in contrast with socially important issues, sensitivity of data, invasion of privacy and the cases in connection with these two statement blocks—we could not here identify common background factors with factor analysis. So this block—similarly to the assessment of data processing institutions—can be qualified as a single-factor block.

Using cluster analysis, we also could only select out that particular sub-group whose members disapproved of the registration of those two data types that showed the lowest rates of agreement. (Especially young people with post-secondary education—in greater proportion than their share in the sample—disapproved of registration of temporary addresses by the ÁNH, while for registration of data about the deceased it was young secondary-school graduates. We nevertheless do not consider these results significant extra information.)

The stratum desiring data protection

We devoted a separate investigation to the question whether we could identify a social stratum aware of the need for data protection, the members of which express, through consistent opinions, a demand for information privacy, data protection and, ultimately, information autonomy. If yes, does this stratum have a common characteristic profile, and along which lines of power and social status or attitudinal stratification is its structure formed?

After several experiments, we selected the sub-sample according to the conditions of the three following test-questions:

1. In Q. 11 of the questionnaire, the respondent chooses the alternative designated by code 1: "*if administrative bodies are interested in some of his/her data, they should always request them directly from him/her, and only they should use them.*"

2. In Q. 16 of the questionnaire, the respondent chooses the alternative designated by code 3, therefore he/she considers it preferable that "*each official body should collect data separately, but only those data that concern them directly.*"

3. In the statement-block of Q. 15, the respondent agrees with statement 5: "*If my data are gathered in one place from several computers, officials will be able to discover things about me which are none of their business.*"

In other words, the selection criteria were the following: the respondent should prefer safety to comfort in administering his/her affairs, and also should prefer decentralised over centralised data registration, and should be aware of the potential dangers of computerised data processing. (The first two criteria are, to a certain extent, also useful in eliminating inconsistent opinions.)

The sub-sample meeting all three criteria contains 161 persons, representing 16.1 per cent of the whole sample. In the following, we will briefly review the questions in which the response rates of the whole sample and those of the selected group differ. Note that we are comparing the whole sample to one part or sub-group of this whole sample, so we are not registering the differences between two independent samples. Since in some cases the selected group's divergent response rates influence the response rates of the whole sample, this imparts a downward bias to the observed differences. From the point of view of the interpretation of the data, however, we still found it expedient to compare the total sample with a sub-sample comprising a part of the whole.

Twelve per cent more members of the selected group listen to the radio program "168 hours", and 5 per cent more always watch the TV news. In the selected group there were typically 5 per cent more "yes" answers for all nine categories of Q. 3 of the questionnaire (*"Do you talk about administrative bodies in your everyday life..., etc.?"*)

In Question-block 4, a few small deviations can be observed. Issue 6 (the question referring to the freedom of information) was regarded "very important" by 10 per cent more in the selected group. And, in comparison with the shares in the total sample, slight increases can be found in the number of those who regard the issues of the multiparty system and private enterprises "very important". The ranking compiled from average scores is as follows:

Entire sample

Economic crisis	4,91%
Retirement pensions	4,70%
Social security	4,66%
Freedom of speech	4,64%
Privacy	4,53%
Freedom of information	4,47%
Unemployment	4,47%
Equal rights for women	4,28%
The issue of refugees	4,15%
Private enterprises	4,13%
Workers' power	3,86%
Multiparty system	3,46%

Selected group

Economic crisis	4,96%
Social security	4,75%
Retirement pensions	4,66%
Freedom of information	4,64%
Freedom of speech	4,59%
Privacy	4,54%
Unemployment	4,51%
Equal rights for women	4,33%
Private enterprises	4,30%
The issue of refugees	4,20%
Workers' power	3,90%
Multiparty system	3,63%

Thus, the two rankings (together with the scores) are very similar. The only notable difference is the greater appreciation of freedom of information in the selected group *(Figure 9)*.

In response to Q. 5 (*"What data do you think are registered about you in official places?"*), a few more members of the selected group mentioned data of an economic character but we note separately that in the same group the proportion of those mentioning police data was a few per cent lower, and the number of answers referring to an all-embracing registration together with the negligible number of disapproving opinions was virtually the same. Thus in this respect the selected group does not represent a radical standpoint. It also has to be noted that only 14 per cent of the selected group disagreed with the introduction of the personal identification number,

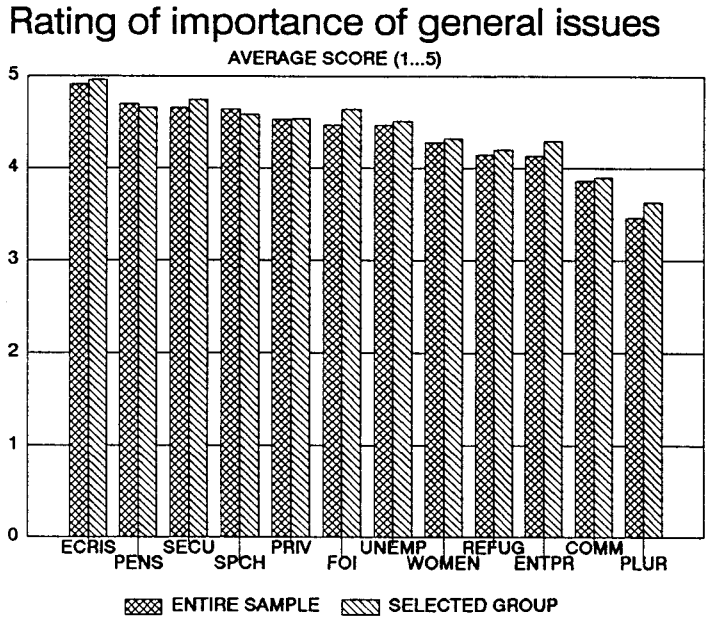

Figure 9

although this is double the proportion in the total sample.

In connection with Q. 7 (*"What do you think the personal identification number is for?"*), it can be observed that, for most of the questions, the share of the answers coded "0" ("don't know", or unusable answer) is lower in the selected group, here for example 3.8 per cent in contrast to 10.3 per cent of the total sample.

In the block of Q. 8 (*"Would you personally agree or disagree with making public the following data about you?"*), we find significant differences between the distribution of answers for the total sample and that for the selected group *(cf. Figures 10 and 11)*. If, however, we compare the two sensitivity rankings, it is obvious that the rank orderings are almost identical; at most immediately neighbouring issues change positions.

Entire sample

Family life	50.4%
Personal finances	49.2%
Medical history	47.5%
Address	39.1%
Income	36.7%
Plans for the future	36.6%
Personal identification number	34.1%
Past records of personal life	32.8%
Telephone number	30.7%
Religious belief	22.1%
Political views	19.3%
Age	14.9%
Origin	14.4%
Educational level	13.3%
Occupation	9.9%

Selected group

Family life	67.1%
Personal finances	65.2%
Medical history	59.0%
Income	54.7%
Address	54.0%
Personal identification number	52.8%
Plans for the future	52.2%
Past records of personal life	51.6%
Telephone number	39.8%
Religious belief	28.6%
Political views	25.5%
Origin	23.6%
Age	19.9%
Educational level	17.4%
Occupation	9.9%

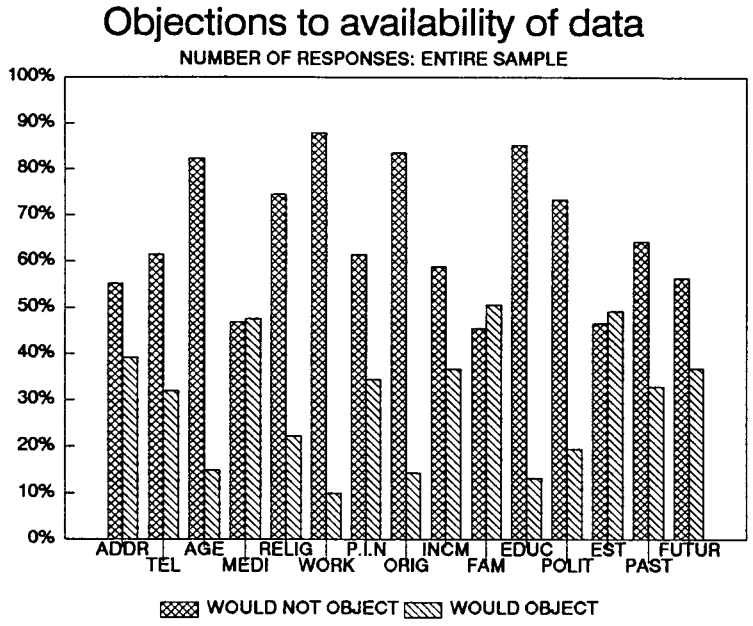

Figure 10

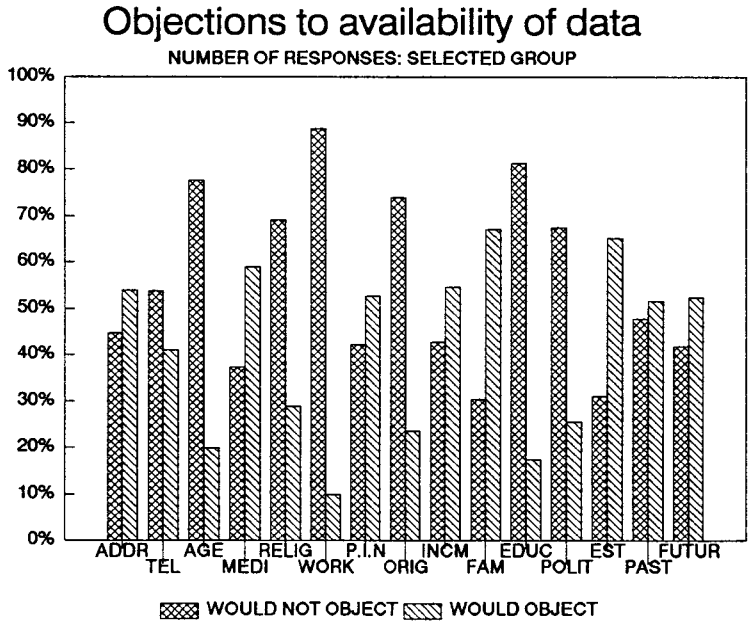

Figure 11

Figure 12 shows that the sensitivity of the selected group is significantly higher along the entire scale, but the ratios of the values (and therefore the sensitivity rankings) are similar. The greatest differences approach +20 per cent (personal identification number, income, finances, past and plans for the future), and differences decrease only for

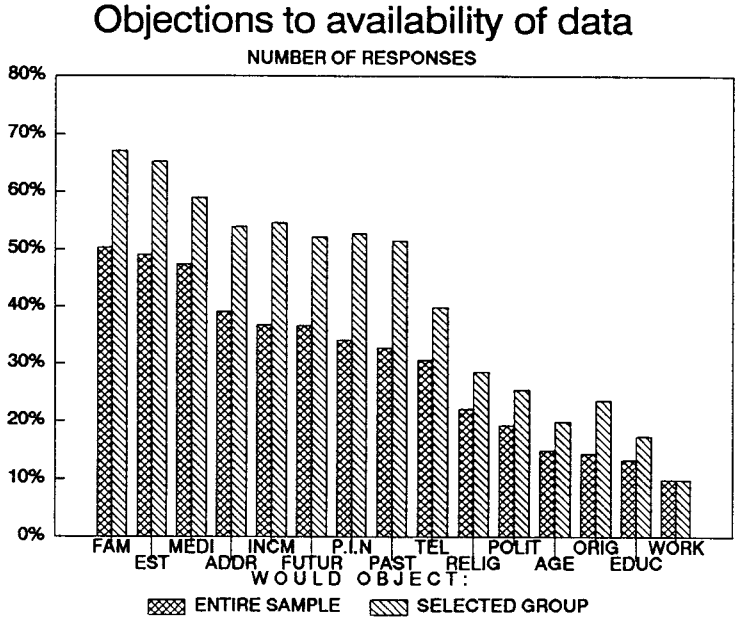

Figure 12

the less sensitive data at the bottom of the ranking.

The situation is to a certain extent similar for the issues of Q. 9 ("*Is your private life invaded or not...*"); if we compare *Figures 13 and 14*, in the latter the larger share of the less densely shaded columns stands out, indicating invasion of privacy. If we put the

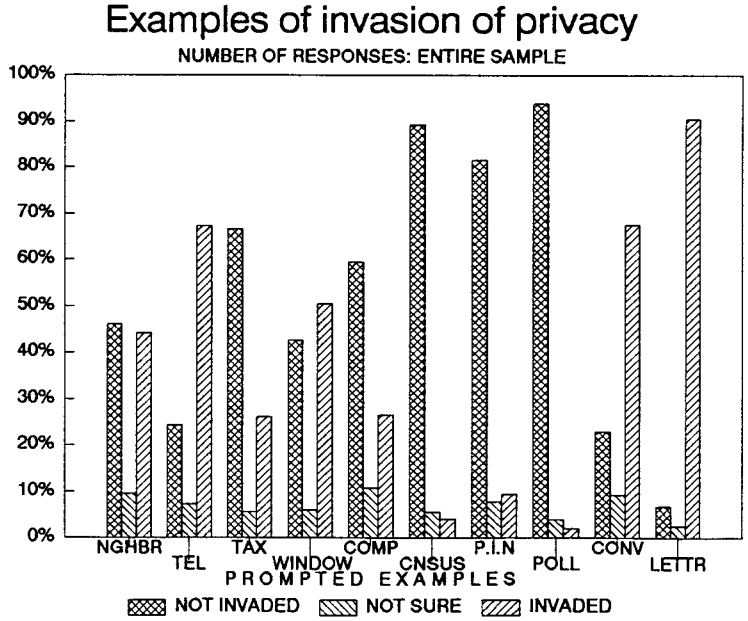

Figure 13

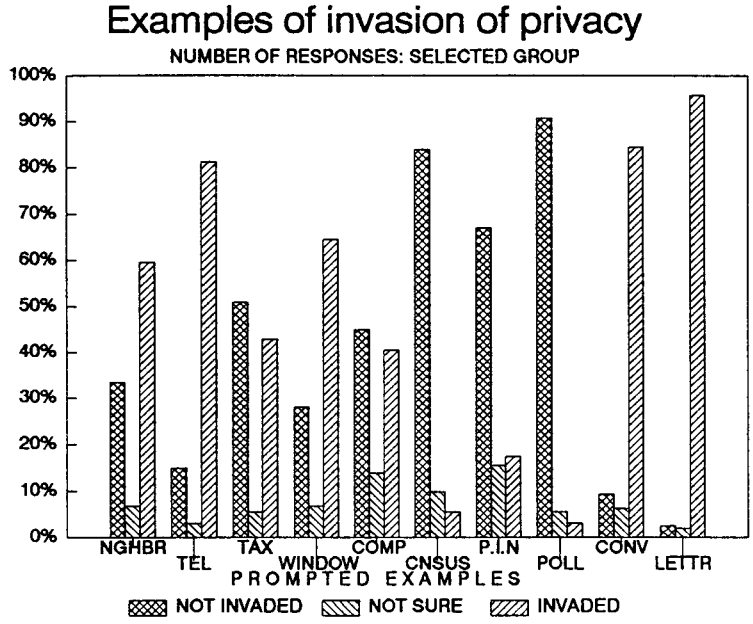

Figure 14

two rankings side by side, however, it turns out that in only one place do two neighbouring elements change positions:

Entire sample

Letters are received open	90.8%
Conversations are monitored	67.9%
Telephone calls are monitored	65.7%
People watch through the window	50.5%
Neighbours are curious about one's family life	44.1%
Computerised data collection	26.6%
Taxation authorities monitor one's finances	26.2%
Data must be supplied together with name and personal identification number	9.5%
Census-takers ask about personal and family data	4.1%
Opinion researchers ask about one's views	2.0%

Selected group

Letters are received open	95.7%
Conversations are monitored	84.5%
Telephone calls are monitored	80.7%
People watch through the window	64.6%
Neighbours are curious about one's family life	59.6%
Taxation authorities monitor one's finances	42.9%
Computerised data collection	40.4%
Data must be supplied together with name and personal identification number	17.4%
Census-takers ask about personal and family data	5.6%
Opinion researchers ask about one's views	3.1%

Thus, if we report the response rates of the total sample and of the selected group in a common diagram showing the relative shares *(Figure 15)*, then two nearly parallel scales connecting the peaks of the related columns appear, in which the selected group represents the higher values. The typical distance between the two series of figures decreases only at the two extremes, but in these places the figures in any case approach 100 per cent and 0 per cent.

The frequencies of responses that suggest disobedience in data supply are virtually the same (8–10 per cent) for the two examined samples (Q. 10), while, in the selected group, a higher share of respondents find supplying

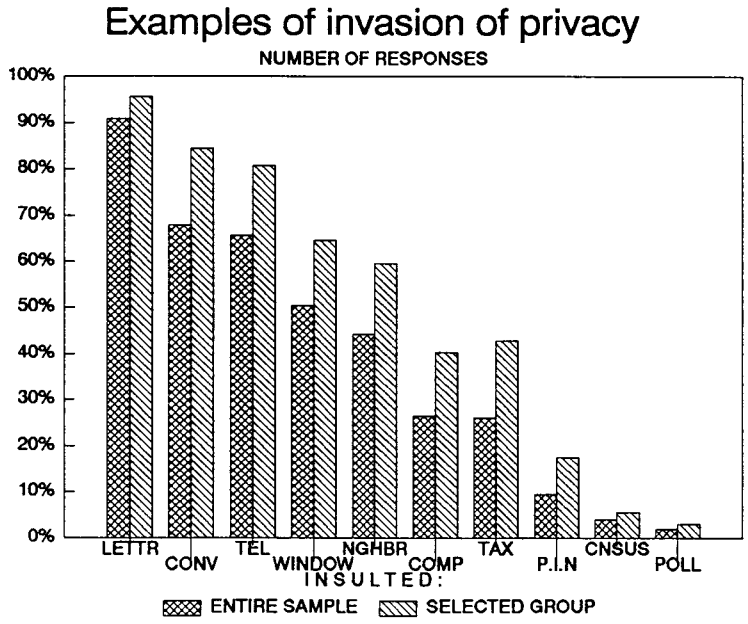

Figure 15

data annoying or burdensome (20.5 per cent in the total sample and 35.4 per cent in the selected group). Among the reasons for the latter (Q. 10.2), the selected group less often mentioned having to fill in masses of forms and the complicatedness of the questions, but more often referred to their distrust of bureaucrats, to the invasion of privacy and to official maltreatment, compared to the total sample.

In the statement block of Q. 12, we find both positive and negative deviations among the response rates of the two samples. For the selected sub-sample, the largest positive deviation was in statement 3 ("*It is annoying that administrative bodies want to know everything about me*"): the proportion of agreement was 68.3 per cent, as against 47.1 per cent, while the largest negative deviation could be observed in the assessment of statement 5 ("*It makes no difference where and what kind of data are being registered about me*"). Here the proportion of respondents who agreed was only 29.2 per cent, as against 47.3 per cent of the entire sample. If we group the statements according to the sign of the deviations in the proportion of agreement, then from the selected group's viewpoint responses to statements 1, 3, 6, 7, 9, 10 and 12 fall on the positive side and to statements 2, 5 and 11 on the negative side; there is practically no deviation in the response rates for statements 4 and 8.

It appears at first glance from this grouping that the popularity of statements representing the advantages of registration is lower, while that of those emphasising the dangers is higher in the selected group. If we again examine the graphic illustration of the results obtained from factor analysis *(see Figure 6)*, we can determine that in the two samples examined deviations of the response rates are polarised precisely along the factor dimensions identified there: support for statements representing considerable weights in the privacy/data protection dimension has increased, and support of statements heavily weighted in the con-

fidence/order dimension has decreased in the selected group. Moreover, it can also be shown that the extent of change is related to the dominant factor weights of a particular statement: the largest deviations pair up with the largest factor weights.

In contrast to 42.1 per cent of the total sample, 60.9 per cent of members of the selected group said that they wanted to know more about the fate of their data (Q. 13); in each point of Q. 14 (*"When you are asked for data, do you consider it necessary that they inform you..."*), over 90 per cent of the respondents considered it necessary to be informed in accordance with the international standards of data protection at the time of data collection. In addition, 98.8 per cent desired information on the purpose for which the data were requested.

In the statement block of Q. 15—similarly to the previous block—both positive and negative deviations occur in the distribution of the answers between the two samples. In the selected group the proportion of agreement is higher for statements 1, 2, 7 and 8, and lower for statements 3, 4 and 6. This clear polarisation also corresponds to the results gained from factor analysis (Figure 7): the popularity of strong statements in the pro-computer dimension decreased, while that of strong statements in the contra-computer dimension increased, compared to the total sample. (Statement 5 was not included here because it was one of the filtering criteria in the selection of the group.)

Nearly 20 per cent more in the group said that they were interested in whether their data were to be used with or without their names, and somewhat fewer believed that the data they gave without names would not ultimately be used with names anyway.

In the assessment of potentional data processing institutions (Q. 21), the selected group is more critical than the sample as a whole. It is a characteristic deviation that, for the individual institutions, there are fewer "not classified anywhere" answers and more assessments of "unfair" (cf. Figures 16 and 17). Only public opinion research, the census and the ÁNH, which are among the most indifferent categories in the total sample as well, received a nearly equivalent assessment.

Members of the selected group had heard about the existence of the ÁNH in a similar proportion as in the total sample, they have similar ideas about its operation, and similarly agree with the registration of the data types listed (with the exception of the registration of data of deceased persons, to which 14 per cent more in the selected group object). It should be noted that they also approve of the activities of the ÁNH in a by-and-large similarly high proportion. Fewer would approve an expansion of the registration activities of the ÁNH, however (Q. 24.1): only 25 per cent would approve in the case of family relationships, and only 12.9 per cent in the case of interconnections among the registrations. (This latter figure is barely half of the comparable value for the total sample.)

A full 10 per cent more of the selected group would desire the oppurtunity to check on their own data through the Post, and the in any case overwhelming objection to extenstion of the ÁNH's data registration profile, is in this group close to 100 per cent. (At the same time, a few per cent more would be willing to pay in return for data supply from the ÁNH.) The two samples show no significant differences, neither in the conceptual amounts offered for data handling (Q. 31), nor in their estimations of the annual per capita registration costs of the ÁNH (Q. 32). The share of those calling for legal regulation of data protection is hardly greater in the selected group than the total sample average.

To summarise, therefore, the characteristics of the selected group in comparison with the total sample: there are no differences between the two samples in the ranking of socially important issues, despite greater

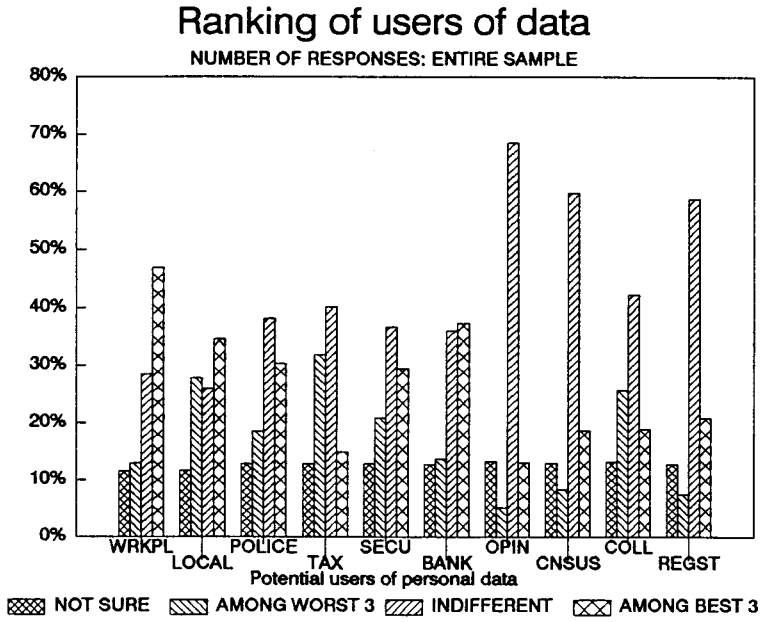

Figure 16

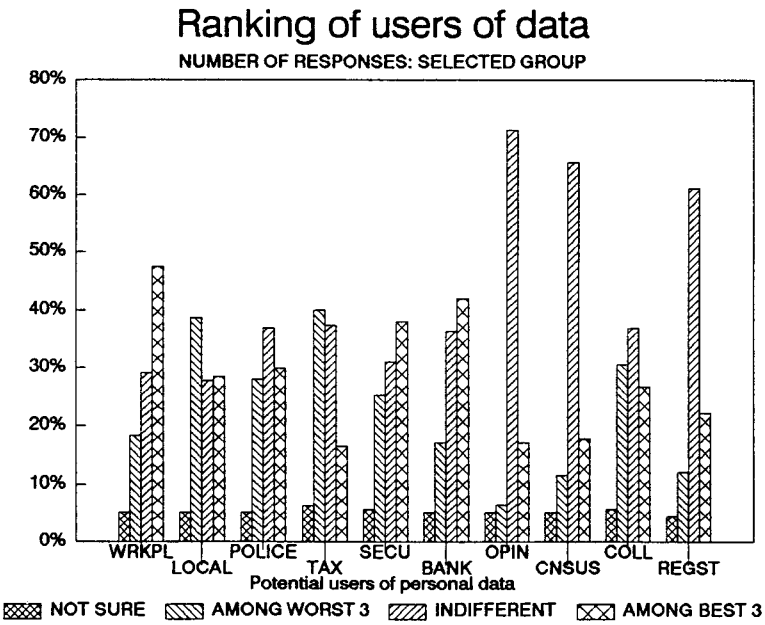

Figure 17

conflicts in the low degree of disobedience to supplying data to institutions and in the general assessment of the ÁNH. Moderate (in general 5—20 per cent) but consequential and easily interpretable differences can be observed, with respect to the selected group, in a more negative assessment of data processing institutions (except for the ÁNH),

in a higher sensitivity for personal data, in a greater approval of statements referring to the data protection consciousness and to the dangers of registration, and in a more critical assessment of computerised registration.

Members of this group are generally somewhat better informed, are less uncertain in the formation of their opinions, are more interested in the fate of their data, pay more attention to the differences between named and anonymous data processing, are bothered more by compulsory provision of data, and more strongly oppose the establishment of interconnection among registrations. According to the selection criteria, they place safety before comfort, prefer decentralised to centralised registration, and are suspicious about the computerised processing of personal data. Accordingly, they more strongly oppose an expansion of ÁNH activities, call for more information about their data, and almost 100 per cent of them oppose the selling of their personal data for various information services.

We therefore see that a specific data-protection-conscious profile emerges for this group, of which the chief characteristic is that the more general the issues, the more the opinion of the group resembles that of the total sample, and the closer we approach personal data, the more definite their opinions are, while being at the same time free of extreme or radical statements.

Of whom does this stratum consist? According to the conventional wisdom, we might assume mostly of intellectuals from Budapest. We might think that the city environment, being better informed, the impact of political propaganda, the critical stance of the intellectuals, their informal contacts and, last but not least, their higher professional competence in these issues (perhaps they are themselves employed in this area), would promote the development of this profile. We might assume further that these respondents are younger people, who are politically more active, more suspicious about the state, and more familiar with modern computer technology.

The reality, however, shows something else: according to our investigations there were no significant differences between the compositions of the total sample and the selected group with respect to age, sex, social status, educational level, occupation, position in the workplace, the kind of work, or place of residence. Moreover, the subsample contains a few per cent *fewer* Budapest citizens and a few per cent more villagers, and also a slightly *smaller* share of intellectuals, highly educated people and top managers, offset by more of the "middle classes". Beyond this, a few per cent more employed persons and a few per cent fewer pensioners appear in the selected group, though it must be emphasized that these are not significant deviations in the composition of the sample.

The interpretation of this result caused debate within our research team as well. In my personal opinion, in the present Hungarian society (where because of social, economic, and political peculiarities, the opportunity for information privacy, as understood in developed Western democracies, has not been given in any social measure to the present generations, and where, moreover, even the concept of privacy is deficient), data protection consciousness appears, as a result of a number of backgroup factors, as an indirect manifestation of familial, religious, cultural and other traditions, and so it cannot be expected to show a direct and exclusive connection with the basic variables of social status. (Public opinion research done since the time of the survey shows that the role of these basic variables has significantly decreased in the structure and distribution of opinions.)

Neither did we find differences on the level of attitudes: the few questions that deal

with relations to political parties (referring to current membership or the intention to join) show similar response rates in the two samples, or else the number of items is so low that they cannot be evaluated.

On this basis we may conclude that sensitivity in private life and, within that, the desire for information privacy and the awareness of data protection issues (i.e. the factors that represent one of the foundations of civic information autonomy and self-determination) do not follow the traditional social stratification but rather constitute a new dimension in the society.

D. Changes since the previous year

Deriving from its very nature, the survey is only able to offer a single snapshot, a single chronological cross-section. Under the present rapidly changing political and social circumstances, any approach or data series which can offer a reliable description of the changes over time can count on heightened interest. We are in a fortunate position from this point of view because, in respect to certain issues, data which can be compared to the results of the current survey are available from a survey conducted one year earlier.

Data of the 1988 survey

In November 1988, we conducted a personal-interview-based survey on a nationwide representative sample of 1000 persons concerning their familiarity with computers, their relationship to computers, and the collection and registration of data.

Here we will cite only a few questions from this 1988 investigation that are important from the point of view of our present topic. Some of these questions—by intent—are included in the present investigation on privacy, in very similar formulation and in a similar context, hence they are suitable to bring out the strength and direction of changes that have taken place over the year in question.

In 1988, nearly all of the people were aware of the use of computers in state administration and of the computerised character of registration: 96.5 per cent of the sample said they knew of institutions where their data were registered on a computer. Most of them listed 2–3 institutions, among these the most frequently mentioned were local councils, the tax office, the ÁNH, and the Central Statistical Office, with a combined frequency of 57.4 per cent. In second place were authorities in charge of maintaining public order: the police, the national defence force, the Ministry of the Interior, traffic authorities and the criminal registration office, mantioned by 44.6 per cent. The total frequency of occurrence of social security, the pension institute, the health service, the medical registrations and the blood bank was 25 per cent. The in-house registrations of workplaces, companies and institutions were mentioned by 19 per cent. The combined frequency of mention of registrations of the service sector, bill collectors, trading companies and financial institutions was 17 per cent. Among other institutions, 16 per cent mentioned educational institutions, scientific institutions, the Academy of Sciences and even the Hungarian Institute for Public Opinion Research, which conducted the survey. (Of course, the sum of these percentages exceeds 100 per cent since each individual institution was listed together with others.)

The respondents listed, with rich imaginative power, the data about them which they believed were kept somewhere in one or other registry. That they supposed that somewhere were registered data about whether they had a bank account, what their family was like, their life history, incomes, political convictions, their popularity, their trustworthiness, their habits, their past, the date of expiration of their identity cards and so forth, indicates these people's mistrust.

Before asking people about their experiences with computerised registration, we asked several questions to discover the opinions formed about registration in general.

One of the questions was as follows:

With which of the following statements do you most agree?

1.Too many data are registered about people. Fewer would be quite enough.

2.Only those data which are necessary are registered.

3.Even more data should be registered.

According to 21 per cent of the respondents, too many data are presently (in late 1988) being registered about people. Sixty-three per cent said that only the really necessary data were being registered, and 16 per cent thought that too few data were being registered. Supposedly, the latter respondents meant that, if registrations were more complete they would not have to supply data again and again for every single administrative procedure.

Those with higher educations typically expressed definitely positive or definitively negative opinions. The majority of those with secondary-school education (71.5 per cent) leaned toward the belief that only the really necessary data were being registered. Skilled workers often suggested that too many data were being registered. (22.2 per cent were of this opinion, as against 18 per cent of those with secondary-school education.) The group of post-secondary graduates took two extreme opinions as their own: according to a quarter of them (25.5 per cent), too many data were being registered about people, according to 27.7 per cent, too few.

With our next question, we wished to learn whether or not the respondents believed they had a say in what sort of data were registered about them. The interviewer read out three alternatives to the respondent:

1.Yes, people have a say in it.

2.Only partially.

3.They have no say in it.

Ninety per cent of the sample gave utilisable answers to this question. Among the utilisable answers, the opinion that people had no say in what was being registered about them was dominant (74.8 per cent of the valid answers and 67.6 per cent of the total sample). We found that progressing from the lowest educational level upwards, more and more people believed they had no say in data registration. While nearly 30 per cent of those having less than eight years of elementary school thought they had a say in this issue, only 10 per cent of university graduates said the same.

The next question was the following:

"Is it necessary that the data of each person living in the country should be registered centrally?") According to an overwhelming majority of respondents (92 per cent), the answer was yes. Only 6.4 per cent said there was no need for central registrations. About 2 per cent gave an answer which had not been included in the alternatives offered, mentioning regional or dispersed registrations instead of a centralised one. These answers were taken into account separately.

Although the overwhelming majority of respondents agreed with the necessity of a centralised registration, 15 per cent said yes to the question: *"Do you think that centralised registration of data may bring disadvantage or inconvenience to the individual?"* This standpoint was more emphasized among post-secondary graduates with a frequency twice that of secondary-school graduates.

We also asked that if harm can come to the individual from centralised registration, what kind of harm might it be? Here the respondents expressed concern primarily about unauthorised access, the possibility of error, and, in third place, intervention in their private lives.

The counterpart of the latter question

("Does centralised registration offer advantages?") divided the responses more clearly. To 44.5 per cent of the respondents there were no advantages, but 55.5 per cent believed in certain advantages. Skilled workers rejected this most strongly, choosing "yes" and "no" answers fifty-fifty. Graduates of post-secondary education, deviating from the whole-sample proportion, gave definitely positive answers: 68 per cent of them said that centralised registration did have an advantage for the individual.

Here, too, we asked what advantages the respondents had in mind. They mentioned the following most frequently (listed in order of decreasing frequency): speed in administrative procedures, simplicity, manageability, accessibility and the quality of security.

Regarding the reservations and the high frequency of negative assessments raises the question whether or not the population agrees with the drawing up of comprehensive law regulating the handling of data and information. Our question was: *"Is there any need, in your opinion, for a law which would regulate the registration and use of data and other information and guarantee the individual's personal rights in connection with this?"* Eighty-nine per cent of the sample gave an opinion: 89.4 per cent of those who responded (79.5 per cent of the total sample) said there was need for an Act like that, and only 10 per cent believed there was no need. Advocates of drafting a law were present in larger proportions in the groups having higher levels of education.

Proportion of advocates of a Data Privacy Law in groups of various educational levels

Eight years of elementary school	84.0 per cent
Skilled workers	88.0 per cent
Completed Secondary School	92.7 per cent
Completed post-secondary education	94.9 per cent

Changes since 1988

If we compare the 1988 data series to the results of the present investigation, in certain issues we can register directly interpretable changes. In the question of a law on privacy, the proportion of those agreeing with the necessity of a law is lower, although only slightly. While one year previously 79.5 per cent of the utilisable answers called for the draughting of such a law, in Autumn 1989 73.5 per cent expressed this opinion. It could be concluded from this shift that the distrust of the present practice has slightly decreased since the share of those who hope for a satisfactory situation from high-level legal regulation has slightly decreased.

Our further data, however, do not reinforce this interpretation. In 1988 an overwhelming majority of the respondents took a stand in favour of the necessity of centralised registrations. The share of those who opposed centralised registration (6.4 per cent) or gave some sort of other answer (2 per cent) was only about 8 per cent.

In the present investigation, the share of those giving the indifferent answer: "It makes no difference to me" is a comparable figure, 10.7 per cent. The group of those giving definite answers was polarised and reduced slightly (84 per cent). From among the more differentiated response-alternatives offered in 1989, only 41.8 per cent opted for centralised registration, while the other alternative ("if each official institution collected the data separately, but only those data which belong to their competence") was chosen by 41.9 per cent of the respondents.

Both in 1988 and in 1989 we read out to respondents series of statements which set out certain views which could be regarded as typical. It may be concluded from the proportions of agreement with the various views that the general public has shifted more toward the views that reflect distrust.

The following statement sets out a typically distrustful view: *"You can never know who*

will use the data collected from us by administrative bodies, or for what purpose." In Autumn 1988, the proportion of those agreeing with this statement was 59.7 per cent. A year later, when the statement was presented almost verbatim, the share of those agreeing rose to 70 per cent. Similar statements referred to people's uneasy feelings: *"It is annoying that you are registered everywhere."* In Autumn 1988, the share of those agreeing with this statement amounted to 20.9 per cent. When, a year later, the following similar question was put to the respondents: *"It is annoying that official bodies want to know everything about me,"* the share of those who agreed more than doubled, to 46.9 per cent. The share of those agreeing with indifferent responses of the "it makes no difference" type remained essentially unchanged over the year, staying around 45–47 per cent.

In the assessment of the role of computers and in the computerisation of administration and registration, opinions have similarly shifted in the direction of distrust.

One of the statements that expressed distrust in the 1988 questionnaire was the following: *"We can less easily find our way in computerised administration than before."* The share of those who agreed was 36.4 per cent. In Autumn 1989, when this statement was repeated word for word, the share of those who agreed rose to 50 per cent.

The two surveys included the same statement with respect to a definitely positive assessment of computers: *"When computers are used, people's affairs are always handled in a more organised and clearer way."* In Autumn 1988, 75.9 per cent agreed with this statement, while a year later only 58.5 per cent did.

In summary, therefore, it may be concluded on the basis of our data that the weight of elements reflecting trust in connection with the registration of personal data and, especially, with centralised and computerised registrations decreased between 1988 and 1989, while that of elements reflecting distrust and disapproval increased, both in significant amounts.

E. Summary

We may summarise observations and conclusions of the first Hungarian investigation on information privacy, conducted in late 1989, as follows:

The majority of the sample has an opinion about the registration of personal data and about the various aspects of information privacy and autonomy, therefore the false assumption that this dry subject does not interest people, and that they have no opinion about it, cannot be sustained. (The high share of utilisable answers can partly be attributed to the careful formulation of the questions: we sought, with great care, to avoid the use of abstract or technical terminology.)

The views and attitudes in connection with information processing are to a certain extent underdeveloped, but not to such a degree that it would hinder their analysis. Multivariate statistical methods can identify certain background factors that determine opinions and attitudes. According to our analysis, such factors are the privacy/data protection factor, the trust/order factor, and a pro-computer or anti-computer attitude with respect to personal data.

According to the logic of the structure of the questionnaire, the questions proceed from a broader sphere of private life and privacy and, within that, information privacy, onto the issues of data and information registration and then toward the concrete assessment of the State Office for Population Registering and its activity. In another dimension, the questions can be grouped according to a few basic points, such as being well-informed, or the characteristics of trust, obedience, or data protection consciousness.

On this topic we may regard the respondents as moderately well-informed in general, but less well-informed when it comes to concrete knowledge. They have a by and large adequate knowledge of what institutions register what kinds of data, or what the personal identification number is for, but many of them confuse personally identifiable (named) and anonymous data processing, and they designate the population census as the activity of the ÁNH.

On the basis of the answers, there appears a considerable mistrust of information authorities, their proprietors and their representatives. In Hungary the preponderant share of information authority is concentrated in the sphere of state power (in the institutional system of the former one-party state, in state companies and in personnel departments). Thus, the questions generally referred to "official bodies" or "official places". The mistrust of official bodies in general on the one hand, and of computerised registration on the other, can be shown in two statement blocks of the questionnaire. On the basis of a 1988 investigation used for comparison, the proportion of indifferent or agreeing opinions decreased, and that of distrustful or disapproving opinions increased, over the course of a year.

In the assessment of potential data processing institutions, the most positive picture formed for the workplace and the National Savings Bank, the most negative about the tax office and bill collectors. The ÁNH, together with public opinion research and the census, received mainly an "indifferent" rating.

In spite of the distrust and of the fact that a fifth of the sample were definitely upset by some aspect of the provision of data, the overall majority are obedient data providers: they deliver all kinds of personal data even

if they are opposed to it or if the data collector has no legal right to the data. We found disobedience in data provision to be only occasional.

In contrast to the foregoing, data-protection consciousness is not a negligible factor. According to our selection, the share of the stratum with a heightened data-protection consciousness makes up 16 per cent of the sample. The particular profile of this stratum is characterised by higher sensitivity in private life, increased sensitivity of their personal data, increased distrust of data processing and of computerised data processing in particular, and more definite opinions and greater knowledge about this particular topic. Members of this group object in above-average proportions to the introduction of the personal identification number, they want to know more about the fate of their personal data, and the difference between named and anonymous data processing is more important to them. They more strongly oppose extension of the activities of the ÁNH, especially the possible selling of their data for the purposes of information services. They desire more information about their data registered in the ÁNH, yet on none of the issues do they represent any extreme opinions.

The main determinant of this stratum is their greater demand for information autonomy. There is no significant difference in the stratification of this particular subsample compared to that of the sample as a whole, neither according to social status nor political allegiance. This similarity suggests that the demand for information autonomy is not distributed according to traditional social stratification, but rather represents a unique dimension.

The entire sample ranked the inviolability of private life and the other major branch of the direct civil information rights, the freedom of information, in the middle range of issues that are regarded as definitely important. Among the list of issues, the economic crisis ranked first in order of importance, while the multiparty system came last.

The most sensitive among the personal data are those about family life, financial position and medical history. Every second respondent would object to making them public. The least sensitive data are national origin, educational level and occupation. The personal identification number fell in the middle range.

In general, the assessment of the ÁNH can be regarded as positive. A large majority of the sample agreed with its activities, both in general and in particular. But the majority disagree with extending the activities of the ÁNH, especially with selling of personal data as an information service, but also with an expansion of the number of data types to be registered, and with interconnecting of the various registrations. Three-fourths of the respondents consider legal regulation of the rights and responsibilities with respect to personal data necessary.

Postscript

It can be predicted that privacy and information privacy issues will be of growing importance in the changing East-European societies. In Hungary the recent decision of the Constitutional Court which outlaws the Personal Identification Number, last year's "Hungarian Watergate" scandal, the collection and use of individual votes in the new elections, the restructuring of information power, the significance of the newly established human rights and freedoms, including the still-pending combined Privacy and FOI Bill, and the government's previous intention to sign the data protection convention of the Council of Europe and its recent full membership in the organization, all emphasize the need to explore the national and international implications in this field.

It would be desirable to make comparisons between Hungary and developed Western countries in this respect, considering the cultural and social differences, Hungary's claim to adopt the political, legal and social standards of Western democracies and the differences among these standards, the technical and legal perspectives of information processing and the people's demand for informational self-determination.

In addition, it seems important that the exercise of these possible new rights and its supervision be assisted by consistent surveys and analysis in order to make the tendencies measurable, not only from an administrative but also from a sociological point of view.

Therefore—in the Editor's opinion—it would be necessary to work out international or regional standards for the investigation of the concept of privacy, data protection consciousness and the claim for informational delf-determination in society, considering the existing social and cultural differences between the eastern and western parts of Europe, while still providing possibilities to compare the countries and to measure and evaluate changes in the future. In this work Hungary—making use of its previous experience—could play a coordinating role in the changing East-European region.

Appendix

The questionnaire

Q. 1. Do you usually listen to "168 hours" in the radio?

—yes ——→ How often?
1 — no 3 — always
0 — 2 — occasionally
X —

Q. 2. Do you usually watch the news on television?

— yes ——→ How often?
1 — no 3 — always
0 — 2 — occasionally
X —

Q. 3. Do you usually talk about...

	in the family			with friends and acquaintances			at your workplace		
	yes	no		yes	no		yes	no	
1. administrative bodies in general?	2	1	0 X	2	1	0 X	2	1	0 X
2. your own bureaucratic experiences?	2	1	0 X	2	1	0 X	2	1	0 X
3. how much others know about you?	2	1	0 X	2	1	0 X	2	1	0 X

Q. 4. How important do you think it is that unemployment not increase? Please grade these as is usually done in the schools: i.e. 5 means very important and 1 means not at all important. (And how important do you think it is that...)

	very important				not at all important	
1. UNEMPLOYMENT NOT INCREASE	5	4	3	2	1	0 X
2. retirement pensions be raised?	5	4	3	2	1	0 X

	very important				not at all important	
3. others not intervene in one's private life?	5	4	3	2	1	0 X
4. everyone be able to say what he/she thinks?	5	4	3	2	1	0 X
5. women have equal rights with men?	5	4	3	2	1	0 X
6. everyone be able to find out from official bodies what he/she wants to know?	5	4	3	2	1	0 X
7. the state take care of those who need assistance?	5	4	3	2	1	0 X
8. different political parties operate in Hungary?	5	4	3	2	1	0 X
9. workers' power be safeguarded?	5	4	3	2	1	0 X
10. the fate of the Roumanian refugees be settled?	5	4	3	2	1	0 X
11. the hard economic situation be put in order?	5	4	3	2	1	0 X
12. everyone be able to start a private enterprise?	5	4	3	2	1	0 X

Q. 5. What data do you think are registered about you in official places?

(Please put down the first five data types mentioned)

_____

00 —
XX —

Q. 6. Do you approve or disapprove of the introduction of the personal identification number in Hungary?

_____

3 — yes
1 — no
2 — makes no difference, cannot decide
9 — does not know what the personal identification number is
0 —
X —

→ GO TO Q. 8.

Q. 7. What do you think the personal identification number is for?

(Please put down the first three things mentioned)

_____

00 -
XX -

Q. 8. Would you personally object or not object if the following data about you were made publicly accessible to anybody?

	would object	would not object	it depends	
1. address	3	1	2	0 X
2. telephone number	3	1	2	0 X
3. age	3	1	2	0 X
4. medical history	3	1	2	0 X
5. religious beliefs	3	1	2	0 X
6. occupation	3	1	2	0 X
7. personal identification number	3	1	2	0 X
8. origin	3	1	2	0 X
9. income	3	1	2	0 X
10. family life	3	1	2	0 X
11. educational level	3	1	2	0 X
12. political views	3	1	2	0 X
13. financial situation (real estate, money, valuables)	3	1	2	0 X

	would object	would not object	it depends	
14. personal past	3	1	2	0 X
15. plans for the future	3	1	2	0 X

Q. 9. Is your private life invaded or not invaded if your neighbours are curious to know about your family life?
(And if...)

	invaded	not invaded	it depends	
1. YOUR NEIGHBOURS ARE CURIOUS TO KNOW ABOUT YOUR FAMILY LIFE	3	1	2	0 X
2. someone taps your phone?	3	1	2	0 X
3. taxation authorities monitor your finances?	3	1	2	0 X
4. people watch through your window?	3	1	2	0 X
5. data about you are collected by computer?	3	1	2	0 X
6. census-takers ask for data about you and your family?	3	1	2	0 X
7. you must supply your data with name and personal identification number?	3	1	2	0 X
8. public opinion researchers ask about your views?	3	1	2	0 X
9. someone monitors your conversations?	3	1	2	0 X
10. you receive your letters opened?	3	1	2	0 X

Q. 10. Does it happen or not happen that at official places you are unwilling to give certain data about yourself?

3 — yes
1 — no
2 — it depends
0 —
X —

Q. 10.1. And does it happen or not happen that when you are asked for data, you find it annoying or burdensome?

2 — it happens
1 — it does not happen
0 —
X —

→ GO TO Q. 11.

Q. 10.2. What bothers you at such times:
that...

	bothered	not bothered	
1. you have to write a lot?	2	1	0 X
2. the questions are complicated?	2	1	0 X
3. they learn your data?	2	1	0 X
4. people are treated too bureaucratically?	2	1	0 X
5. you do not trust the office?	2	1	0 X

Q. 11. What would you prefer:
1 — if administrative bodies are interested in some of your data, they should always request them directly from you, and *only they should use them,* or
2 — these bodies should acquire your data from each other?

8 — neither
9 — both, makes no difference
0 —
X —

Q. 12. I will now read you some statements. Please answer whether you agree or disagree with them.

	agree	disagree	it depends	
1. Officials want to know too much about people	3	1	2	0 X
2. I have nothing to hide; I would disclose any data about myself	3	1	2	0 X
3. It is annoying that official bodies want to know everything about me.	3	1	2	0 X
4. More data should be registered about people, so that certain people cannot "fish in troubled waters"	3	1	2	0 X
5. It makes no difference to me where and what kind of data they register about me	3	1	2	0 X
6. Registering so much data about people puts an unnecessary financial burden on the state	3	1	2	0 X
7. You can never know when knowledge about you might be misused	3	1	2	0 X
8. If an official body asks for data about me, I can always know what it's for	3	1	2	0 X
9. The more the state knows about people, the more it can influence them	3	1	2	0 X
10. I wonder what they use all those data about people for	3	1	2	0 X
11. The more places my data are registered the better, because this way the state can better look out for me	3	1	2	0 X
12. You can never know who might get ahold of the data that an official body collects about you	3	1	2	0 X

Q. 13. Would you like to know more about what happens to your data or do you find what you now know about it sufficient?

2 — want to know more
1 — know enough
8 — know nothing about it
9 — other, namely:.....
0 —
X —

Q. 14. When you are asked for data, do you consider it necessary that they inform you whether data provision is compulsory or voluntary?
(And that...)

	necessary	not necessary	it depends	
1. WHETHER DATA PROVISION IS COMPULSORY OR VOLUNTARY	3	1	2	0 X
2. which law or rule is the basis for requesting your data?	3	1	2	0 X
3. for what purpose your data are requested?	3	1	2	0 X
4. where, to whom or to what kind of office your data might be forwarded?	3	1	2	0 X
5. what benefits or drawbacks might arise from providing your data?	3	1	2	0 X

Q. 15. You surely know that nowadays data are being registered by computers in more and more places. I will now read a few statements about this subject. Please tell me whether you agree or disagree with these satements.

	agree	disagree	it depends	
1. Computerized administration is even less easy to comprehend than formerly	3	1	2	0 X
2. It makes no difference whether my matters are handled with computers or not because officials do what they want anyway	3	1	2	0 X
3. It is best if my data are collected by computer because then I don't have to run around to different places	3	1	2	0 X
4. With computers, people's affairs are always handled in a more organized and clearer fashion	3	1	2	0 X
5. If my data come together in one place from several computers, officials will be able to discover things about me which are none of their business	3	1	2	0 X
6. It is very good that everybody has a number of his own because in this way there is no disorder in the offices	3	1	2	0 X

	agree	disagree	it depends	
7. If an administrative body has a computer, it can learn much more about people with it	3	1	2	0 X
8. People are not inventory items to be numbered	3	1	2	0 X

Q. 16. Which alternative would you prefer:
1 — that data of all people would be kept in a central register, or
3 — that each official body would collect data separately, but *only those data* that concern them directly.

2 — makes no difference
9 — neither
0 —
X —

Q. 17. Are you interested or not interested whether your data are used with or without your name?

2 — intersted
1 — not interested
0 —
X —

→ GO TO Q. 20.

Q. 18. Do you trust or not trust that your data given without name will *only* be used anonymously?

3 — yes
2 — not completely
1 — no
0 —
X —

→ GO TO Q. 20.

Q. 19. When do you give your data or tell your opinion more willingly:
3 — if they are requested without name, or
1 — if they are requested with name?

2 — does not make any difference
9 — does not want to give his/her data at all
0 —
X —

Q. 20. In your opinion which is more in the interest of people:
2 — that data about them at official places should always be precise and complete, or
1 — that they should *not* be precise and complete?

_____

0 —
X —

Q. 21. PACKET OF CARDS

I will now hand you a packet of cards containing various official institutions. I would like you to select the three institutions which handle your data most fairly in your opinion.

AFTER SELECTING:

Now please select the three institutions which handle your data least fairly.

1. workplace
2. local council
3. police
4. tax office
5. social insurance administration
6. National Savings Bank (Savings Cooperative)
7. public opinion research
8. census
9. bill collectors
10. State Office for Population Registering

CODING:
3 — classified among the three fairest
1 — classified among the three least fair
2 — not classified anywhere
0 —
X —

Q. 22. The State Office for Population Registering has just been mentioned. Have you heard of this office before?

_____

2 — yes
1 — no
0 —
X —

→ GO TO Q. 24.

Q. 23. What do you think the State Office for Population Registering deals with?

(Please put down the first three things mentioned)

_____

00 —
XX —

Q. 23.1. Now I will list for you the data types that the State Office for Population Registering registers centrally for each Hungarian citizen. Please tell me for each one whether you approve or disapprove of its being registered there.

	approve	disapprove	it depends	
1. complete name	3	1	2	0 X
2. mother's name	3	1	2	0 X
3. place of birth	3	1	2	0 X
4. date of birth	3	1	2	0 X
5. marital status	3	1	2	0 X
6. sex	3	1	2	0 X
7. Hungarian or foreign citizenship	3	1	2	0 X
8. permanent address	3	1	2	0 X
9. temporary address	3	1	2	0 X
10. age of the data	3	1	2	0 X
11. registration of data of deceased persons	3	1	2	0 X

Q. 24. Do you approve or disapprove of such an office functioning in Hungary?

2 — approve
1 — disapprove
0 —
X —

→ GO TO Q. 25.

Q. 24.1. Would you approve or disapprove if the State Office for Population Registering, besides the listed data, would keep a record of everyone's educational level?
(And if it would...)

	approve	disapprove	it depends	
1. KEEP A RECORD OF EVERYONE'S EDUCATIONAL LEVEL	3	1	2	0 X
2. keep a record of everyone's family relationships (who is your wife/husband, brother/sister etc.)?	3	1	2	0 X
3. have access to other registers where other data are kept about people?	3	1	2	0 X

Q. 25. Everyone may go to the central office of the State Office for Population Registering or its branch office at the local council to check on whether his/her data are registered correctly. Would you want or not want the State Office for Population Registering to send you a letter containing the data which are registered about you so that you could check on and correct them if necessary?

2 — would want
1 — would not want
0 —
X —

Q. 26. The State Office for Population Registering officially discloses people's data for administrative (police, military, medical) and scientific purposes.
2 — Do you approve that besides the above the State Office for Population Registering should give people's name, address and other data e.g. to photographers, agents or for advertising purposes, or
1 — do you find it more proper that these entrepreneurs should find people in other ways?

9 — other, namely:.....
0 —
X —

→ GO TO Q. 30.

Q. 27.
2 — Would you approve if in the future private entrepreneurs and small businessmen could also get these data, or
1 — would you find it more proper if only state enterprises could get them?

0 —
X —

Q. 28. At the State Office for Population Registering everyone has been able to prohibit that his/her data be given out for business or advertising purposes. If the State Office for Population Registering wanted to give out your name, address and other data e.g. to photographers, agents or for advertizing purposes, how would you decide:
1 — your data could be given out any time,
3 — your data should not be given out at all, or
2 — if your data are to be given out, they should ask for your permission.

_____

0 —
X —

Q. 29. Would you approve or disapprove if the State Office for Population Registering were to give out personal data for business for money?

_____

2 — would approve
1 — would not approve
9 — other, namely:.....
0 —
X —

Q. 30. If you wanted data (e.g. if you wanted to organize a reunion of former schoolmates) and it would cost money, would you still request these data or then not request them?
3 — would request
1 — would not request

_____

2 — it depends (in general)
9 — it depends, how much it would cost
0 —
X —

Q. 31. The sate population registering is free. If people had to pay in order that their personal data be always accurately registered in an official place, how much would you give each year for this?
.....(Forints)

_____

000 —
XXX —

Q. 32. What do you think — how many Forints does it cost the State Office for Population Registering per year for the computerised registration of one person?
.....(Forints)

_____

00000 —
XXXXX —
(If he/she says "a lot" or "not much", ask "how much is that?")

Q. 33. In your opinion

2 — is it necessary to regulate in a separate law who has what rights and obligations in connection with the people's personal data, or

1 — is it not necessary?

_____

0 —

X —