# Studying National Culture by Means of Quantitative Methods

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The use of qualitative method, e.g. field observation in natural settings and informal in-depth interviews, has long been considered a hallmark of European ethnology – just as participant observation has been named the primary method of social anthropology. This paper argues, however, that quantitative methods, including representative samples of whole populations and structured interview instruments, may be necessary for studies of national culture. This thesis is elaborated using cross-cultural data which have been gathered and analyzed in efforts to describe the national culture of Sweden.

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In the beginning of the 80s I embarked on a study of Swedish mentality or culture and personality – or national character, to use a pre-scientific term. In this paper I will describe how it began, what methods were first used, and how I gradually came to realize that studying national culture also demands quantitative methods – even for an ethnologist. At least there seem to be difficulties associated with national character research which require quantification.

Having my educational background in ethnology and social anthropology, I started in the traditional way: by collecting *qualitative* data. Interviews were carried out on foreign immigrants in Sweden, in order to get their assistance in discovering peculiarities about Swedish culture and to overcome my own cultural blindness. In what way do Swedish ways of thinking and behaving deviate from what is considered normal and natural in Yugoslavia, Greece, Latin-America or Finland?

Interviews were also conducted on scholars from other countries who had done research in Sweden. I studied reports written by foreigners in Sweden within areas like housing sociology and urban planning. A considerable number of journalists and novelists have also given their impressions of their visits to Sweden, by pointing out phenomena that were extraordinary in their eyes and worth being noted. These kinds of qualitative data were also incorporated into the picture that I tried to construct.

Some of my colleagues in the field of human studies also became interested in the theme of Swedish national culture about the same time that I did: Jens Allwood, a linguist, wrote a paper on Swedish communication patterns (1981), Ulf Hannerz, a social anthropologist, wrote a paper on "Swedish culture" within a broader project on complex societies (1983), and Per Lundberg at Lund University, a young scholar in educational psychology, was a Swedish pioneer in studying cross-cultural communication. Others could be mentioned as well. Their excellent contribution to the general knowledge on Swedish mentality were also added to my own collection of ideas, hypothesis and data.

A book entitled *Swedes as others see them* (1981) written by an English author, Jean Phillips-Martinsson, was the text that inspired me more than anything else. Ms. Phillips-Martinsson is a free-lance consultant in cross-cultural communication within business and lives and works in Sweden. Her book is a manual

written for Swedish businessmen who work abroad. Her intention is to make them aware of their own culture and how certain cultural elements may hinder their efforts to make fruitful contacts and to sell Swedish products. The book also contains some advice for foreign readers about what they should consider for communicating with Swedes. The book by Ms. Phillips-Martinsson is qualitative in its approach, although its presentations of "Swedishness" are based on unsystematic quantitative data, i.e., a considerable number of interviews with foreign bankers and businessmen.

I worked with "open eyes" like many other ethnologists: my preliminary hypothesis guided me while I watched Swedish TV programs, when I read Swedish newspapers and made observations in public places, stores and on subway stations. A general theory that underlined this data collection was the one originally presented by Ruth Benedict – the *configuration of culture,* the suggestion that there is a basic structure in every culture and that – principally – everything could be linked to that structure. This perspective also means that a cultural theme in a nation should appear in many diverse situations and different spheres: in modes of behavior, in folklore, in laws, in artistic styles, etc. As long as the actors are Swedes, their particular Swedish ways of doing things should express the "configuration" of Swedish culture. If, for example, avoidance of face-to-face conflicts is a part of Swedish culture, this personality trait should appear in such diverse areas like public debates, places of work, schools, day care centers, etc.

## Problems of studying national culture

1) One problem in studying national culture in a country like contemporary Sweden is the complexity of the society. What is Swedish in a country which is inhabited by so many different categories, a country which contains different social strata and numerous sub-cultures and sub-groups? Also, as a matter of fact, even in small scale societies it has been found that the concept of "basic personality structure" is not adequate: there is simply no such thing!

Instead, the term "modal personality" which was introduced by the American anthropologist Cora DuBois is a more appropriate concept. "Modal" or "most common" does not necessarily mean that something includes the majority of a population, only that it is the most frequent type.

In order to measure frequencies one needs systematic quantification. One must have representative samples of populations and one needs to use statistical procedures. Anthony Wallace, using Rorschach tests in his study of two Indian tribes (1952), was able to document that 37 per cent of the Tuscarora Indians corresponded to what he had defined as the modal personality, whereas 5 per cent of the Ojibwa Indians corresponded to the modal personality type of the Tuscarora. However, 28 per cent of the Ojibwas constituted the modal class in their own society.

However, the small samples used in Wallace's study and in culture and personality research by several other authors were criticized as well as the not so rigorous nature of Rorschach testing. Psychologists such as Alex Inkeles and Daniel Levinson are often cited with reference to their general demand for larger representative samples and more rigorous procedures in studying national character (Inkeles & Levinson 1954, 1969).

2) One weakness of qualitative studies is that they do not produce any knowledge about the relative distribution of various phenomena, and another is the risk of subjective bias in the interpretation of data. There is always a subjective factor in research on humans, but this factor can be minimized by using data-collection methods which will not allow the researcher himself to influence the empirical outcome.

In all studies of one's own contemporary national culture introspection will to some extent function as a guide and a research instrument, both in looking for and dealing with data. Introspection may certainly be fruitful – not only unavoidable – in national character studies, but without a complement of quantitative methods the scholar may be tempted to – unconsciously – construct a very personal picture. He may use data selectively to make them fit

his favorite theories. He may be seduced by his own ideas.

3) A third weakness of qualitative studies is that there are phenomena that can hardly be discovered by traditional anthropological methods. How do you observe "guilt feelings"? If you conduct interviews, what questions should be asked to get data that is both valid and reliable?

To answer the question about guilt feelings: one may find areas of cultural "externalization" which could be theoretically associated with feelings of guilt, for example the firm restrictiveness of Sweden to alcohol politics. However, this theory will remain loose and speculative as long as it is not supported by any psychological data.

## Some examples of using quantitative data in studying national culture

### CMPS personality inventory

CMPS is a personality inventory which was constructed by two Swedish psychologists (Cesarec & Marke 1964). It has been used in numerous psychological and psychiatric studies in Sweden. CMPS contains 165 questions which the respondent is asked to answer with either yes or no. Eleven variables (personality traits) are measured by means of 15 questions each. The variables are all derived from Murray's theory of psychogenetic needs (1938): achievement, affiliation, aggression, defence of status, guilt feelings, dominance, exhibition, autonomy, nurturance, order, succorance.

In a recent study of Finnish and Swedish personality (Daun, Mattlar & Alanen 1988), two collections of CMPS data were compared. The Finnish study (with about 400 respondents) was done in 1984–1986 in the Turku area and the Swedish study (with almost 1 000 respondents) was done in 1970 in the county of Stockholm; in both cases, the study was based on a statistically representative sample of the population. The Finnish sample contained only Finnish speaking subjects (no one belonged to the Swedish-Finnish minority). The Swedish sample contained only subjects born in Sweden.

Interestingly enough, answers to the individual questions in the CPMS inventory had never before been published, mainly because the research interest among psychologists and psychiatrists only concerns the variables. For an ethnologist, however, the separate questions are useful instruments in getting close to social reality. The following question could be mentioned as an example: "Are you very anxious to keep in touch with your friends even if they have, for example, moved to another town?" This question immediately brings you to the theme of friendship in Finland compared with Sweden.

It appeared to be much more common among Finns (78%) to be "very anxious to keep in touch with friends" compared with Swedes (56%). Although the reliability of both qualitative and quantitative data collections have their limitations, the quantitative results of these two CPMS studies are consistent with – and thereby supported by – other data on Finns and Swedes. According to Allardt (1975: 198, see also Jaakkola & Karisto 1976), Finns have significantly fewer friends than Swedes, which should motivate more Finns than Swedes to keep in touch with those friends that they have, "even if they have for example moved to another town". In Allard's study 27 per cent of the Finnish respondents said that they *did not* "have good contact possibilities", whereas only 8 per cent of the Swedes gave the same answer (Allard, p. 107).

This single CPMS question, together with fourteen others, contributes to the description of "affiliation" among Swedes (as they appeared in the Stockholm county in the year 1970; in 1988 a comparative study is being conducted among ethnology students at the University of Stockholm).

Another aspect of affiliation needs is given by the following question: "Can you endure being separated from your friends for quite a long time?" 70 per cent of the Swedes answered yes, whereas only 41 per cent of the Finns answered affirmatively. The difference in the answers reflects the fact that close friendship means more (i.e. *for more* people) in Finland than in Sweden. Many more Finns than Swedes answered yes to the following question: "Are you always anxious to get in close and

personal contact with other people?" (50% Finns and 29% Swedes).

Considering these questions it should be obvious that the single questions offer a more close, concrete and vivid picture of the personality structure of a population, i.e. compared with, for example, some index score of a personality trait (e.g. Hofstedes (1980) study of masculinity in 40 countries).

Referring to the earlier mentioned concept of *modal* personality, the use of a personality inventory, like the CPMS, presents data on the *relative frequency* of a particular trait. The figures just given above demonstrate the relativity of "national character traits"; we never found 100 per cent – nor 0 per cent – of the two Nordic populations answering yes to any of the 165 questions. Closest to zero (8% of the Finns, 6% of the Swedes) were answers to the following question: "Does it amuse you to ridicule your antagonists?"

Apparently Swedes and Finns are closely related in their attitude towards this variant of conflict action, as well as in their use of humour as a weapon. The culture confinement of this attitude clearly emerges in comparing a sample of Italian students (age 19–25) at the University of Verona (Daun & Tansella-Zimmermann) with similar young people in Sweden: 50 per cent of the Italian respondents answered yes while only 11 per cent of the Swedish CMPS study subsample (age 18–25) answered yes.

The variation in the per centage of positive answers to questions referring to the same personality variable (in most cases one gets 15 different per cent figures referring to the same CMPS variable), indicates something important. Personality is a phenomenon which "acts" differently in relation to the particular situation. Furthermore, these situations cannot successfully be reduced to – or classified as – a limited number of *universal* social situations. The situations themselves are to a great extent filled with cultural content. Let us go back to two CMPS questions just mentioned: To be left alone for a while, what joy does it give to Swedes? What poetic meaning is given to solitude in Swedish minds? Also: what is funny in Sweden? How is a joking relationship typically

constructed in Sweden? Every single CMPS could probably be a theme for an extensive cultural analysis.

Differences within a national culture could also be described by means of CMPS. As a matter of fact, there is a rather striking variation in the CMPS scales with reference to sex, age and social class (Nyström 1982). Differences between a number of different subcategories (theatre students, art students, psychology students, drug addicts, and others) are shown in the CMPS manual (Cesarec & Marke 1964).

"Guilt feelings", which was mentioned earlier as a psychological state which cannot be "observed", can be documented by 15 CMPS questions. It was shown in our Finnish comparison that guilt feelings are considerably more common among Finns than among Swedes. Forty-one per cent of the Finns answered yes to the following question: "Do you have recurrent feelings of bad conscience without knowing exactly the reason why", while only 26 per cent of the Swedes did so.

Referring to the three problems of studying national culture mentioned in the section above, we may conclude that:

– the use of personality inventory in studying national culture enables us to describe frequencies of the relative distribution of personality traits. It also opens up the possibility of describing various sub-categories within a national culture. The two CMPS samples presented here should meet the demands of representativeness and rigorous procedures which were put forward by Inkeles and Levinson.
– a personality inventory is an instrument which does not allow the researcher's own values or ideology to influence data gathering.
– the use of a personality inventory like CMPS is a method for empirically documenting mental states that cannot be discovered by conventional anthropological procedures.

*Communication Apprehension test (PRCA 20 and PRCA 24)*

James McCroskey, professor of communication studies at the University of West Virginia, USA, is one of the leading scholars in the field of communication apprehension, speech anxiety, shyness and related phenomena.

In our efforts to get knowledge about "shyness", a state which has been mentioned as typical for Swedes, we contacted Dr McCroskey and collaborated on the nature of communication apprehension in Sweden and in the USA.

McCroskey's questionnaires have been used in many parts of North America and also in many other countries to uncover these traits. Shyness has been one of the most important areas of research in the USA for quite some time while academic interest in Sweden on shyness has been strikingly small, almost non-existent.

A Swedish version of McCroskey's PRCA 24 questionnaire was distributed in 1986 and a total of 239 students completed the instrument. In 1985, three hundred and twenty-five ethnology students completed the PRCA 20 instrument which contains 20 questions about situations which can give rise to communication apprehension. The later survey in 1986 was further widened. Together with the PRCA 24 questionnaire three additional questionnaires were distributed: "Willingness to Communicate", "Self-Perceived Communication Competence" and "Introversion" (Daun, Burroughs & McCroskey 1988).

The main finding of the comparison between Americans and Swedes was that there is almost no difference in communication apprehension between the two nationalities. However, there were significant differences in willingness to communicate and in introversion: the Swedes were less willing to communicate and were more introverted than the Americans.

These facts seemed to explain the difference in actual behavior between the two groups. In America there is a cultural norm stressing the importance of verbal communication: one should communicate with other people, including strangers. Individuals who are shy consequently try to overcome this communication barrier in one way or another. In Sweden there is no such norm, at least only with the exception of specific situations and perhaps particularly in certain professions (e.g. among salesmen and at conferences). Swedes are "generous" towards shyness and even seem to associate it with positive personality qualities: being sensitive, reflective, modest. Consequently, shy Swedes are generally permitted to expose their communication apprehension, whereas Americans are not, or at least to a less extent.

The fact that Swedes are less extraverted than Americans also seems to explain their lower degree of willingness to communicate. Fewer Americans are "looking inside" themselves compared with Swedes (shown by Lynn & Hampson 1975).

We learn from this result that similarity in communication apprehension between two national groups like Swedes and Americans would not be possible to discover by just looking at cultural behavior. On the contrary, overt behavior seems to indicate a significant difference between Americans and Swedes: Americans seem to be much less shy. Only by using a survey technique the discrepancy between attitude and action can be discerned. This example illustrates the problem found in point 3 above.


*The Youth of the World and Japan*

In 1977–78 the Japanese government sponsored a comparative international survey of youth in 11 countries which involved 2 000 interviews conducted in each country and were representative of individuals between 18 and 24 years of age.

The answers to one of the questions from Sweden and the USA will be presented here as an illustration of how quantitative interview data can document value differences between the two countries. These differences could only be indicated by qualitative methods in a vague and secondary empirical form (Rehn & Petersen 1980).

*Question: "Do you think that your country has something to be proud of or not? (Choose as many as you like on the card)" Percentage and score.*

|  | Sweden | | USA | |
|---|---|---|---|---|
| History and cultural inheritance | 15% | (8) | 68% | (1) |
| Sports | 44 | (3) | 56 | (2) |
| Levels of education | 41 | (2) | 61 | (1) |
| Social welfare | 60 | (1) | 24 | (5) |
| Science and technology | 29 | (5) | 66 | (1) |

The data show that the concept of "history and cultural inheritance" is relatively unimportant for national pride among Swedish youth, whereas "social welfare" has the greatest importance for them. This distribution of cultural values can only be detected by quantitative survey methods, thereby exemplifying the problem in point 1 above.

*European Values System Study*
The European Values System Study is an international study of values in 13 European countries which was conducted in the beginning of the 80s. It is based on interviews with representative population samples (18–64 years of age) in each country (Harding & Phillips 1986). The countries involved in the project are Denmark, Sweden, Finland, Norway, Great Britain, North Ireland, Republic of Ireland, West Germany, Holland, Belgium, France, Italy and Spain. More countries have later been included in the study: USA, Japan, Hungary and others.

A considerable number of questions were placed under the following headings: leisure, work, meaning and purpose of life, family and contemporary social issues.

I will present the answers to one of the questions as an illustration. The question is: "How proud are you to be _____ (Nationality)? Six countries are presented below for comparisons.

Swedes showed less national pride than all the (twelve) others, except West Germany (and Holland and Belgium). Most pride was found in the Republic of Ireland. It should also be noted that there was a considerable minority in Sweden for which the question of national pride may be irrelevant. These respondents may not have given the issue any previous thought and may therefore find it difficult to offer any opinion whatsoever.

The question of the degree of national pride in one's own country is probably a sensitive one loaded with subjective values. There are individual Swedes who would prefer national pride to be high, and there are others who hope that the "nationalistic element" among their fellow countrymen is a minor one, compared to the more desired "international strivings". In a situation like this, it is particularly important to use research methods which do not allow biases to influence the description. Consequently, this example illustrates the importance of the problem in point 3 above.

*Street names in Stockholm*
A study by Anders Lundin of the distribution of different names given to streets in Stockholm further illustrates the usefulness of quantitative methods. This message may seem

|  | Sweden | Norway | Eire | France | Italy | West-Germany |
|---|---|---|---|---|---|---|
| *Alternative answers* | | | | | | |
| Very proud | 28 | 42 | 66 | 33 | 41 | 21 |
| Quite proud | 41 | 32 | 25 | 43 | 39 | 38 |
| Not very proud | 21 | 23 | 5 | 8 | 11 | 18 |
| Not at all proud | 4 | 2 | 1 | 9 | 6 | 11 |
| Don't know | 6 | 1 | 3 | 7 | 2 | 12 |

too simple in many fields outside ethnology and anthropology, but given the emphasis of the qualitative approach in these subjects, it would be necessary to make this point.

The Lundin's study focuses on two periods, from the 1880s to the 1890s and the 1970s. If one excludes all names which are based on something that exists or someone still alive at the actual time (so-called spontanous names), the rest of the names can be classified into three categories (so-called category names): (1) name associated with "history" (Scandinavian mythology, battles, wars, kings and other persons closely related to Swedish history), (2) "persons" (e.g. famous Swedish authors), and (3) "nature and geographic regions" (e.g. plants and animals or counties in south Sweden).

The relative distribution of the three categories during these two periods strikingly illuminates a shift in certain values (as is shown below). Further data from this study will be given elsewhere (Lundin 1989).

An obvious change from the 1880s and 1890s to the 1970s is the much decreased popularity in using history and people for giving names to streets and the increased popularity of using nature and landscape as names. This finding refers to the problem in point 3 above.

Street names in Stockholm ("category names") during two periods with reference to:

|  | 1880s N=76 | | 1970s N=174 | |
|---|---|---|---|---|
| History | 29,0% | (22) | 1,5% | (2) |
| Persons | 39,5 | (30) | 2,5 | (4) |
| Nature and landscape | 31,5 | (24) | 96,0 | (167) |

*Quantitative versus qualitative methods*
My purpose has been to briefly elaborate the usefulness of quantitative methods in studying national culture. However, for ethnologists and anthropologists, quantification has to be a complement to qualitative methods, not an alternative. Tables, figures and per centages have to be used *in addition to* observations, in-depth interviews, case studies, historical events, and other kinds of qualitative material.

I base this statement on a particular academic tradition which is also a part of a scholarly identity. At the same time, it is probably a matter of taste and perhaps also of a personality orientation among ethnologists and anthropologists. More importantly, it may be that knowledge about a particular culture and society which is built on qualitatively detailed material is a necessary prerequisite for an understanding and an adequate interpretation also of statistical series of data. Hard data in themselves sometimes tell the reader very little.

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