

REPORTS FROM THE SOCIAL RESEARCH
INSTITUTE OF ALCOHOL STUDIES

No. 133

October 1979

ABSTAINERS IN FINLAND 1946-1976.
A STUDY IN SOCIAL AND CULTURAL
TRANSITION

Pekka Sulkunen

The State Alcohol Monopoly
Social Research Institute of
Alcohol Studies
Kalevankatu 12
00100 Helsinki 10
Finland

PEKKA SULKUNEN

Abstainers in Finland 1946-1976. A study in social and cultural transition.

Summary

This report is the first in a series of studies in which the increase of alcohol consumption in Finland is investigated in the context of the drastic changes of living conditions during the post-war years. Like the rest of these studies presently in progress, this one is based on a secondary analysis of four drinking surveys of the Finnish population from 1946, 1968, 1969 and 1976. These surveys are described in the Introduction. In the second chapter of this report the socio-economic background and living conditions of abstainers are studied. The main result is that the decline in abstinence rates has not followed changes in living conditions directly but through growing differences between generations. The post-war cohorts have very low abstinence rates in all population categories.

An analysis of age at first drink in the third chapter shows that the abstinence rate lowered first among the younger generation through a rapid decline in the average age at first drink. This was later followed by a gradual increase of the proportion of drinkers among older women. The declining abstinence rate among older women is not directly related to employment outside the home but is characteristic among all women especially in rural areas, where female abstinence was very common in the earlier years of the investigation.

In the fourth chapter the abstinent sub-population is compared to drinkers. It is shown that among women abstinence is increasingly related to living conditions, whereas among men abstinence is becoming an individual matter determined by drinking problems or personal conviction.

In the last chapter it is shown that the strong decline in abstinence rate nevertheless does not explain a very significant part of the increase in the total annual alcohol consumption by the population. Furthermore, it is concluded that whether one drinks or not is not directly related to changes in living conditions. The effects of the social transition on abstinence and drinking are strongly modified by cultural perceptions of alcohol as a moral issue. These perceptions are shared by all population categories. The liberalisation of these perceptions first occurred among the post-war youth and was later accepted also by older people.

ISBN 951-9191-80-1

ISSN 0356-8113

T A B L E O F C O N T E N T S

ACKNOWLEDGEMENTS	
1. INTRODUCTION	1
Background	1
The data	5
The definition of abstainers	6
2. ABSTINENCE RATES IN SOCIO-DEMOGRAPHIC CATEGORIES 1946-1976	10
Men, women and the total population	10
Occupational groups	12
Rural and urban residence	15
Age groups	18
The generation gap	21
3. AGE AT FIRST DRINK 1946-1976	30
By sex, residence and occupation	30
Age at first drink by age groups	33
Cultural diffusion	40
How different are abstainers?	43
Social distance between abstainers and drinkers by population categories	47
Smoking and attitudes toward alcohol	60
Individual reasons for abstinence	62
4. DISCUSSION: TEMPERANCE AND THE GREAT MIGRATION	69
Quantitative significance of new drinkers	69
The Wet Generation	71
Abstinence and the way of life	72
REFERENCES	75
APPENDIX 1. Population in Finland by age groups	78
APPENDIX 2. Abstainers and drinkers in 1968 and 1976 by education, rural-urban residence, age, employment, occupation, and marital status, %. Men.	79

ACKNOWLEDGEMENTS

This report has been prepared as part of the International Study of Alcohol Control Experiences (ISACE). An earlier version was presented at the Second Working Meeting of ISACE in Pacific Grove, Calif., U.S.A. in April 1979.

The report has been written in close contact with the staff of the Social Research Institute of Alcohol Studies (ALKO). I am indebted above all to Jussi Simpura who made his data available to this study and guided me through the technical difficulties involved in its reanalysis. I am grateful to Juha Partanen, Director of the Institute, for methodological advice and to Kettil Bruun and Klaus Mäkelä for their comments. Eeva Tuovinen has efficiently and skillfully performed the data processing tasks and Göta Friman has typed the various versions of the report.

INTRODUCTION

Background

This report aims to contribute to a sociological understanding of the increase in alcohol consumption in Finland in recent decades.

A similar increase has occurred in most of the industrialised countries. This fact alone seems to recommend a trivial explanation: in time everything goes up (or down): crime rate as well as the GNP. This is in fact what Seppänen has pointed out as one of the results from his multivariate analysis of several hundred time series describing the Finnish society 1911-1961 (Seppänen). The main factor that accounts for the changes in the series is the overall transformation of the society.

This trivial explanation is often broken down to various aspects of the overall change or 'modernisation': more leisure; less children; increased economic wealth; industrialisation; urbanisation etc. For example, the recent Alcohol Committee in Finland held these to be the major reasons for the growth in alcohol consumption (The Report of the Alcohol Committee (Finland), 16).

Furthermore, it is a triviality that in Finland the liberal alcohol policies, culminating in the legislation of 1969, has contributed to the growth.

However obvious these explanations are, their triviality is nevertheless problematic. First of all, alcohol consumption has not always increased. The phenomenon is characteristic only to the post-war period in Finland as well as in most other industrialised countries (Sulkunen 1976).

Secondly, in the light of international comparisons some of the seemingly most trivial explanations do not seem to be empirically true: increase in alcohol consumption is not directly related to the rates of urbanisation or industrialisation (Alkoholinkäyttö, kau-

pungistuminen ja rakennemuutos OECD-maissa toisen maailmansodan jälkeen) or even to economic growth (I have made some unpublished calculations on this. See also Partanen, manuscript, in which it is shown that the growth rates of GNP and alcohol consumption do not correlate very well in Western European countries).

Thirdly, the notion of rising standard of living and even that of increasing leisure (Julkunen & Kunttu 1979) are problematic as soon as attention is paid to a closer investigation of the qualitative aspects of these trends.

Fourth, the role of liberal alcohol policy is complicated since it is often an expression of rising demand as well as it facilitates a growth in supply (Sulkunen 1978). Finally, scientific comprehension requires that the explanation has an internal organisation, which is not attained by simply listing various factors that contribute to the trend. There is no natural necessity of growth in this area any more than in others. Such internal organisation is possible only by showing the pattern of determination of demand, supply and policy in the specific historical circumstances that are under investigation. This again requires a theoretical understanding of how the whole system works.

Instead of going into this theoretical discussion here I am simply proposing that an obvious prerequisite to the explanation is a solid quantitative as well as qualitative analysis of the drinking practices of the population: who uses alcohol, how and in what circumstances. Accordingly, to describe growing alcohol consumption one must pay attention to new drinkers, new ways of drinking and new circumstances of drinking occasions. This should be done in the context of changes in the population structure, living conditions and the general way of life.

I have earlier (Sulkunen 1976) described the general trends of rising alcohol consumption in the world by means of consumption statistics. However, the nature of the task calls for more detailed qualitative descriptions of individual societies.

One such case study was made by Single and Giesbrecht of Ontario, Canada, using mainly aggregate statistics (Single & Giesbrecht 1978). In an earlier paper I described the changes in the British drinking practices since the early 1960's (Sulkunen 1977).

The results of these descriptions can be summarised as follows. The drinking practices of different countries have homogenised in the sense that the overall consumption levels have become increasingly alike. Also the beverage structure of beer-drinking, spirits-drinking and wine-drinking countries have become more similar. This can be taken as one indication that also the ways of using alcohol have changed in a similar direction.

At the same time drinking practices of the populations within the countries have become more diversified through a greater diversity of available drinking locations, less rigid norms specifying how and where different social classes, sexes and age groups can acceptably drink etc.

Furthermore, the changes have been cumulative in the sense that when new drinking customs are adopted by new groups of people, this has tended to encourage rather than to replace adherence to the old customs. For example, when women have begun to drink increasingly, also drinking by men has increased, since they now find themselves more often in situations that allow the use of alcohol. Or, as the British working class has adopted upper class drinking styles in private surroundings, the use of the pub has nevertheless suffered no loss of popularity; on the contrary now even other classes, increasingly also women and young people, commonly visit pubs.

The notion of cumulative growth is related to that of contagion: alcohol use increases through contagion from new drinkers to old ones (more than in the opposite direction) and from one population group to another.¹ The usefulness of the notions of cumulation and contagion are still hypothetical at this point. They can only be demonstrated in concrete and detailed case studies.

Finland is an exceptionally suitable country for such an elaborate case study because of the long history of specialised alcohol research here. The material is rich, detailed and reliable. But also as a case Finland is interesting, having one of the most drastic histories of social, economic and cultural transition in the post-war world. Of course, the growth in overall consumption itself is not only large but also timed so as to raise interesting questions.

¹ The cumulation hypothesis as a bearing on the so-called single distribution controversy. I have elaborated on this in the aforementioned paper (Sulkunen 1977).

The available material would allow a full coverage of all parts of the population drinking practices in Finland: who drinks, in what ways and under what circumstances. This could not be done within the length of less than a book, however, and therefore I am here limiting myself to the first aspect only.

The study of drinkers, or rather abstainers, and changes in drinking versus abstinence among the population was chosen as the particular object of this case study, not only because this is a simple and relatively clearcut level of description. An analysis of abstainers and drinkers is a natural starting point in two substantial ways as well.

First, the extent of the non-drinking population is one of the limits to the annual quantity of alcohol that a population can consume. It is therefore interesting to estimate the direct contribution of new drinkers to the total overall consumption increase.

Secondly, abstinence reflects the role of alcohol in society at large. Abstaining may be the modal way of life in a generally alcohol-free society, or it may be a peculiar type of deviance. Many things can keep people from drinking: principles and moral attitudes concerning alcohol; poor health, attempt to avoid real or imagined drinking problems; difficulties in getting alcohol; or the general way of life imposed by living conditions. In view of the drastic social and economic changes in Finland, it is especially in relation to the latter that abstinence should be analysed. This will provide us a first approximation to the difficult issue concerning how and to what extent alcohol use and non-use are related to or determined by the "logic" of the most solid facts of peoples' lives: occupation, family relations, education, residence, age, sex etc.

This report is essentially a secondary analysis of four sets of survey data that were specifically undertaken to explore various aspects of drinking among the Finnish population in 1946, 1968, 1969 and 1976. Such longitudinal material is exceptional, and even more exceptional are attempts to use it.

In the first part of this report these data, especially the surveys of 1946 and 1976 are used to localise abstainers in various population categories and to detect the pools of abstainers from which new drinkers have been recruited.

In the second part, recruitment of new drinkers is investigated on the basis of information of respondents' age at their first drink.

The third chapter discusses the social differences between abstainers and drinkers and brings further light on the determinants of drinking and abstinence by comparing mainly the 1968 and 1976 data.

The data

The period to be covered in this study is determined by the dates of the first and the most recent general population drinking surveys. They were undertaken in 1946 and in 1976. This time range is excellently suited for my purposes.

The surveys, combined with similar data from 1968 and 1969, are the main body of my material.

The first general population drinking survey was undertaken by Suomen Gallup Oy. It was done under the guidance of Pekka Kuusi, who also wrote the final report on the study. This material will be referred to as K46. It was based on a quota sample that was designed to be representative of the population over 19 years of age. The number of responses was 2 891. No original material is available today, and therefore the re-analysis is restricted to the original report. It is regrettable that the frequencies of observations were not given by Suomen Gallup (Kuusi 1948).

The surveys of 1968 and 1969 were conducted by the Social Research Institute of Alcohol Studies. They were designed and originally reported by Klaus Mäkelä.

The interviewing was done by trained sales clerks of the monopoly liquor stores, which guaranteed an extra degree of accuracy. These data sets were based on a representative sample of the population between 15 and 69 years of age at the end of 1967. The same persons were interviewed in 1969 as in 1968.

The 1968 and 1969 data will be called M68 and M69 respectively in this re-analysis. They are described in Mäkelä 1971.

The fourth survey was also conducted by the Social Research Institute and it was designed and originally reported by Jussi Simpura. It is again based on a representative sample that covers the population at the age of 15-69. These data are referred to as S76 (Simpura 1977).

M68 and M69 were first analysed by relatively undeveloped computers and a tabulator. Therefore they had to be classified more sparingly than S76. For this reason M68 and M69 cannot always be used where they should, but even so they have been very important.

The definition of abstainers

The definition of abstainers presents a number of technical problems. Since my study is based on comparing four sets of survey data, some technical limitations are imposed, especially since the original material of K46 is not available and the analysis must be done with the reported percentage tables.

K46 used two questions to measure abstinence. The first asked: "Do you consider yourself a total abstainer?" The answers were registered as follows: 1. Total abstainer 2. Not abstainer 3. Not a total abstainer but drinks very little (practically abstinent) 4. Cannot say.

The second definition was based on a question on the last drinking occasion: "When did you last take alcoholic beverages and which day of the week was it?" The answers to the first part of the question were registered as follows: 1. Month ago or more; 2. About three weeks ago; 3. About two weeks ago; 4. About a week ago; 5. Two or three days ago; 6. Today or yesterday; 7. Has never taken alcoholic beverages; 8. Does not or will not say. Those who reported having never drunk were defined as abstainers. Nevertheless, Kuusi considered those who had not drunk for a month as typically very infrequent drinkers, and therefore questions concerning motives for abstinence were also asked of them. Answers to the second part of the question were registered as days of the week.

The subjective definition resulted, by and large, in distributions parallel to those obtained from the question on drinking occasions, but some contradictions emerged also. These will be mentioned later.

The other surveys did not include a subjective evaluation of abstinence, and therefore it will not be of great interest here.

The objective definitions of the four surveys agree only

partially. In the later surveys, two objective definitions of abstainers were used. The respondents were first asked if they had taken any alcohol during 12 months preceding the interview. If the answer was no, a further question was asked to find out if the respondent ever had drunk alcohol. Those who had not drunk for a year were classified as abstainers and questions concerning their reasons for abstinence etc. were presented to them. Those who had never drunk were defined as life-long abstainers. Questions about past drinking history were put to those abstainers who had sometimes drunk.

The definition of life-long abstainers in K46 agrees logically with that in the later surveys. There are two problems, however, in using this definition as a basis for comparisons.

First, the technical difference in the questions may create a serious distortion. In K46 "never" was an alternative among other answers to the question: when did you last have a drink. Especially as the next proximate category was as recent as a month ago, many of those who only rarely have drunk long ago will be classified as life-long abstainers. In the later surveys life-long abstainers were identified by two questions, first eliminating those who said they have drunk within a year. Only those who had not drunk for a year were asked about their past drinking behavior.

Secondly, the category of life-long abstinence is conceptually uncomfortable. For most practical purposes this definition is far too narrow: it logically excludes from abstainers all those who some time in the past have taken alcohol even if this happened by accident, at the threat of force, by ignorance, in insignificant amounts and so on. Furthermore, any technique necessarily overestimates the number of those who in fact never did drink. People may also change from drinkers to abstainers, either by persuasion, bad experience or some other reason, and remain teetotallers for the rest of their lives.

Again these objections, it is well to point out that there is a special interest in this very strict category of abstinence. Given the temperance history of Finland, one might expect that life-long abstainers, especially among older people, are those who are most likely to abstain as a matter of principle. It is therefore meaningful and interesting to include this category in the

analysis, even if other definitions will be preferred for most purposes.

The problem with less strict definitions is that the only choice in K46 is to define as abstainers all those who did not drink for a month prior to the interview. This again is too liberal, since even many a heavy drinker may abstain for a month for special reasons, to say nothing about ordinary people. However, since most of those who said they did not drink at least for a month, are in fact very infrequent drinkers, I shall include this category in the analysis.

We might call those who were not life-long abstainers but had not drunk for a month as infrequent drinkers. However, since those who in fact drink very infrequently but happened to do so less than a month before the interview are excluded, and because those frequent drinkers who happened to abstain for a month before the interview are included, this would not be an exact label. I shall call these people as they are: month-long abstainers.

In the interpretation I shall assume, however, that for the most part their individual average drinking frequency is very low.

Problems arise again in comparing month-long abstainers in K46 to those in the later surveys. The technique of the later surveys was developed by Mäkelä (1971) in order to obtain maximum reliability in measuring individual average annual consumption.

In this technique, detailed information is asked about the drinking occasions that occurred during a period, which depends on self-reported average drinking frequency.

The technique makes it possible to classify respondents according to the month-long abstinence criterium. Those who are defined as year-long abstainers are entered as month-long abstainers unless they say they have never drunk. Also those drinkers who report no drinking occasion for a month are included.

Logically this classification corresponds exactly to that used in K46. Technical differences exist, however. The first of these is in the different method of classifying life-long abstainers. This will exclude some extra people from month-long abstainers in K46. Since in K46 only the time lapsed since the most recent drinking occasion was recorded, there may be some

forgetting, and some extra people may be included in month-long abstainers. In the later surveys the criterion is more exact, since all recent drinking occasions were reported (it is hoped).

The effects of those differences cannot be reasonably estimated, but they do not seem to be great enough to distort the comparisons severely, particularly as other sources of error remain in both surveys anyway.

Whenever comparisons are made between K46 and the other surveys, I shall therefore use data on both month-long and life-long abstainers whenever possible. In comparisons that use data from the later surveys only, I shall usually apply the year-long criterium.

2. ABSTINENCE RATES IN SOCIO-DEMOGRAPHIC CATEGORIES 1946-1976

Men, women and the total population

Table 1 displays a concise summary of abstinence rates in Finland 1946-1976. In this table only life-long and month-long abstainers are considered.

This table presents two of the key issues we must discuss in this paper: sex difference and the timing of the changes.

Let us start by commenting on the sex difference first. It seems that until the end of the 1960's the women in this country had very little to do with alcohol at all. Mäkelä (1969) reports that more than half of the women in his 1968 sample had taken alcohol no more than twice during the last year. The proportion of those women who in fact have been regular drinkers at that time must have been very small.

The change among women has been considerable, but the sex differences still remain in 1976.

The very low percentage of life-long abstainers among males is not an indication of a large proportion of regular drinkers. In 1968 20 % of men had drunk no more than twice during the last year (Mäkelä 1969). The small changes shown for men in life-long abstinence rates do not indicate that nothing has changed among men. In fact, even the number of men who have given up abstinence-from-birth may have reduced by as much as one half although the information in the table is too inaccurate to reveal this. The sex difference gives rise to an important question to be discussed in later chapters of this report. The rise in consumption level has been largely quantitative for men. If life-long abstinence signifies a determined refusal of alcohol as a matter of principle, then men have not changed their principles about alcohol - they have simply begun to drink more and more often.

Women, on the other hand, have largely abandoned abstinence and therefore the increase in the overall consumption of alcohol has involved moral decisions, a qualitative step from teetotalism to drinking.

Table 1. Last drinking occasion by sex in 1946, 1968, 1969 and 1976 in percent of the population categories. Population over 19 years.

		never	month ago or more	more recently	N
Total population					
	K46	19	30	51	2 891
	M68	19 ¹⁾			1 663
	M69	15 ²⁾			1 570
	S76	9	20	70	2 601
Women					
	K46	31	33	36	..
	M68	32 ¹⁾			420
	M69	25 ²⁾			399
	S76	15	25	60	1 326
Men					
	K46	5	26	69	..
	M68	4 ¹⁾			1 243
	M69	3 ²⁾			1 171
	S76	4	16	80	1 275

Notes: 1) Calculated from frequencies given in Mäkelä 1969, tables 1 and 6. Frequencies for women and men were weighed with the respective estimation coefficients (3 635 for women; 1 126 for men) to arrive at an estimate for total population.

2) Estimated from percentages and frequencies given in Mäkelä 1970, table 5 and in Simpura 1977, table 4.

Another interesting sex difference emerges from the rates of month-long abstainers. Whereas the contrast between men and women has been levelling off strongly as regards life-long abstainers, the contrast has grown slightly larger in month-long abstinence. In so far as month-long abstinence (i.e. very infrequent drinking) can be considered a transitory stage in one's becoming a regular drinker, this means that men are approaching the end of their course whereas women are still in 1976 at an early stage of becoming regular drinkers by majority.

Table I poses one further question of importance: what has been the timing of these changes. The table has it that the reduction of abstinence rates has taken place only after the Alcohol Act of 1969. This should not be taken quite literally and I shall challenge the result with other data later on. For now, it is enough to point out the deficiencies in the figures. The measurement technique would imply that the figures for 1946 on life-long abstinence are too large as explained before. On that account, the table leads one to think that life-long abstinence rates have in fact grown 1946-1968. However, other errors such as sampling bias and questionnaire effects interfere to an unknown extent (Mäkelä 1969). Nevertheless, there is no denying that abstinence rates have declined abruptly in 1969 and that the decline has continued since then, especially among women.

Occupational groups

Kuusi adapted the occupational categories used in official censuses for his purposes in order to combine status hierarchy with industrial sectors. In this way he arrived at a classification of five occupational classes that probably reflected job-related differences in living conditions and way of life relatively well in the post-war years. The categories of occupational positions were named as follows:

- I farm owners, farm supervisors/foremen
- II farm workers, loggers, fishermen
- III industrial workers, artisans and so called servants (this probably refers to personal service occupations rather than the "service sector" in the modern sense: banking, insurance and government)
- IV office workers, supervisors/foremen and other so called middle class. I shall call this class the "lower white collar".
- V higher civil servants, managers, independent entrepreneurs and so called liberal professions. I shall call this class the "upper white collar".

These names are the only indications of how the classification was actually made.

Since the basic material is no longer available, it is impossible to construct a classification of occupational status that would exactly correspond to this.

In the 1976 data, occupation has been registered in a two-dimensional classification with 26 positions indicating both status and industrial branch. These were intuitively pressed into Kuusi's five classes. Those who could not be so grouped were kept in a separate class. Kuusi/Gallup left no "unclassified" cases in K46.

Keeping in mind that the S76 material has been re-classified intuitively, it nevertheless serves the practical requirements of comparison relatively well.

The most interesting groups are I, III, IV and V and it is my belief that the classifications agree as well as they could, considering that the nature of occupational positions has changed so much that any exact correspondence would be impossible anyway.

Table 2 presents again a summary of the comparisons. It is interesting to note that the differences between the farming population and industrial workers are small in 1946. The only occupational group that essentially differed in 1946 from the others was the "upper class" (group V in K46), who had a much lower abstinence rate than anybody else in this country.

As the table reads, drinking has not become more common among farmers at all, whereas it has among all other groups. The reduction in the rates of life-long and of month-long abstainers has been largest among "the so-called middle class" (group IV in K46), but relatively modest among the industrial working class. Therefore, the difference between lower and upper white collar groups has tapered off but grown between the industrial working class and the lower white collar. White collar occupational groups therefore seem to have contributed most to the ranks of new drinkers, considering the substantial increase in the proportion of these occupations in Finland (see for example Waris 1973, 36).

Some reservations must be made to these conclusions, however. The demographic structure of the Finnish population has undergone a tremendous change. This has risen the average age of farmers as the young generation has migrated from the country and moved to other occupations (table 3). There is a great danger, therefore, to mix occupational differences with the effects of age. This

Table 2. Last drinking occasion by occupational position in 1946, 1968, 1969 and 1976. Population over 19 years.

occupational position	never	month ago or more	more recently
unclassified or unknown			
K46	-	-	-
S76 (N=117)	9	24	67
farmers			
K46	22	33	45
S76 (N=415)	21	26	53
farm workers etc.			
K46	23	32	45
S76 (N=57)	14	16	70
industrial workers			
K46	17	28	55
S76 (N=1 033)	9	20	71
lower white collar			
K46	16	30	54
S76 (N=670)	5	19	76
upper white collar			
K46	10	24	66
S76 (N=309)	3	16	81

alerts us to be careful in our other conclusions concerning occupation and abstinence. It is also likely that in 1976 the lower white collar group is younger than it was in 1946. Anyway, the average age of that occupational group is clearly lower than the others, except of those whose occupation could not be classified. The oldest occupational group is farmers.

I shall return to these questions in a moment, after a few comments on abstinence rates in rural and urban communities.

Table 3. Average age of occupational groups in S76. Years.

	women	men	total
unclassified	35.7	26.5	32.6
I farmers	49.8	46.8	48.3
II farm workers etc.	42.3	41.4	41.7
III industrial workers	42.0	38.4	40.0
IV lower white collar	36.3	38.3	36.9
V upper white collar	40.3	39.8	40.0
TOTAL	40.7	39.7	40.2

Rural and urban residence

Comparisons between K46 and the other surveys by urban-rural residence is made problematic not as much by different research methods as by history itself. Until 1977, there were three administrative categories of local communities in Finland: towns, townships and rural communes. These had different systems of local administration, but they also differed in the degree of urbanization: townships were smaller than towns, but they usually were industrial centers dominated by one or two industries, usually wood processing. They also had commercial centers around which the inhabitants and the industries were concentrated. Until 1969 rural communes were under prohibition: liquor stores or restaurants could not be operated in them. Townships have had the full rights of towns in this respect.

Since the end of the 1960's a large number of local community limits have been changed, and many townships and rural communities have become towns. Thus many who were earlier classified as residents of rural communes now came to be townspeople overnight, without moving a finger.

This is not all, however. There has been a tremendous migration from rural to urban communities, which has transformed the age and sex structures of rural and urban communities: especially girls in working age have moved away and the elderly have

stayed behind. Furthermore, the ecological structure of rural communes has changed. Many of them now have vivid commercial and service centres that have a strong radiance in the surrounding countryside at long distances.

In 1946 the townships were classified as rural communes, whereas in the later surveys they were classified as towns. The number of townships, towns and rural communes and the percentage of the population living in them are given in table 4.

The population living in townships has remained relatively small. Furthermore, changes in the degree of urbanization have been so great that the difference in classifying townships as rural communes in 1946 and as urban communes in the later surveys does not essentially distort comparisons. Nevertheless, these problems should be born in mind and only relatively large changes should be considered relevant.

The first point to observe in table 5, which displays the comparisons between the surveys, was made by Kuusi himself (Kuusi 1948, 42). In spite of almost full prohibition in rural communes (not in townships), the differences between rural and urban residents were small. Nor have the differences grown - or levelled off - essentially. By and large, the development in the country has followed a relatively similar course as in towns.

Table 4. Number of towns, townships and rural communes and their population as a percentage of total population in Finland 1946, 1968, 1969 and 1976.

year	towns		townships		rural communes	
	number	popu- lation %	number	popu- lation %	number ¹⁾	popu- lation %
1946	35	19.8	26	4.3	490	75.9
1968	47	39.7	30	8.4	460	51.9
1969	49	40.9	29	8.6	445	50.5
1976	63	53.6	22	5.2	390	42.2

Note: 1) Approximations

Sources: Suomen Tilastollinen Vuosikirja 1948, 1968, 1969 and 1976.

Table 5. Last drinking occasion by rural-urban residence.
Population over 19 years.

type of residence	never	month ago	more recently
urban			
K46	14	27	59
S76 (N=1 545)	8	18	74
rural			
K46	20	31	49
S76 (N=1 056)	11	24	65

This agrees with Österberg's finding that the overall consumption level, beverage structure and the structure of sales by distribution channels have developed very similarly in all parts of the country (Ahlström-Laakso & Österberg 1978).

The small differences that we can observe by comparing the changes in life-long abstainers to those in month-long abstainers may be insignificantly small, considering the coarseness of the data. However, since they are largely parallel to the pattern found in the previous analysis of sex differences they might deserve attention here.

Considering the wide changes in the demographic structure and especially the age differentiation mentioned above the rural-urban contrast could be expected to grow.

Measured by percentage points, the rural-urban difference in life-long abstinence rates has in fact become slightly smaller. However, in the rates of month-long abstainers, the contrast between town and country has become stronger. This indicates that urban residents have moved from the infrequent to the frequent category of drinkers more often than the rural people, who are at an earlier stage of becoming regular drinkers.

That by and large the rural-urban contrast has not accentuated, indicates that cultural diffusion has taken place: rural and urban residents have never been very different as regards

abstaining, but now they are even less so. It is possible that this holds for many other aspects of life as well.

Age groups

In discussing rural-urban differences and occupational groups the possible effects of the age differentiation of the countryside and agricultural occupations were already mentioned. This is because age has been usually found to be related to abstinence very strongly: both those who are under 20 years and those over 50 are the most abstinent people (Mäkelä 1969; Simpura 1977). It is most important for the purposes of this report that this relationship was very weak in 1946 but very strong in 1976 (table 6).

Table 6. Last drinking occasion by age groups in 1946, 1968, 1969 and 1976 as a percentage of the age categories.

age/sample		never	month ago or more	more recently	N
20-29	K46	17	28	55	..
	M68	10 ²⁾			367
	S76	3	13	84	696
30-49	K46	16	28	56	..
	M68	17 ²⁾			699
	S76	6	17	77	1 013
50-64	K46	22	32	46	..
	S76	16	30	54	678
65-69	K46 ¹⁾	26	40	34	..
	S76	23	27	49	214

Notes: 1) 65 and older

2) Mäkelä 1969, p. 53

In K46 only the very old are essentially more abstinent than the others by the life-long criterion, and even the month-long abstinence rate rises only gradually with increasing age. In S76 the increase in life-long and month-long abstinence is relatively sharp from the 30-49 age group to the 50-64 age group.

Age differences in S76 may arise in two different ways. Either people stop drinking when they grow older because of events in their life-cycle, or because of ill health and other age-related reasons ("age status effects"). Or the difference is the result of differences between generations: those born later into a different world drink more than their parents in the course of the whole life-cycle (for a more extensive discussion see Mäkelä 1970).

The differences between age groups in life-long abstinence within each survey are logically inter-generational, since one cannot become a life-long abstainer once having been a drinker (in reality, survey responses do not necessarily obey the rules of logic, of course). Hoping that this is by and large reflected in the percentages, we find that the difference between the youngest and the oldest age groups in 1946 is somewhat larger in month-long than in life-long abstinence. This could be the result of cutting down drinking at old age.

In any case, the differences between age groups are much stronger in S76, which can be explained only by a growing difference between generations.

Since K46 exaggerates the number of true life-long abstainers, especially in the older age groups, the intergenerational differences between those who were born in 1916-1925 and those born earlier probably are not very great in reality. Instead, the contrast of the 1916-1925 cohort to those born later, let us say, after the Prohibition era, is striking. When the Prohibition cohort was in its most active drinking age in 1946, it included more than three times as many life-long abstainers as the post-war birth cohort of 1946-1955 at the same age in 1976.

This difference between birth cohorts is essential for understanding any age-related variations in abstinence; indeed, it is crucial in understanding the other aspects of rising overall consumption as well.

First of all, it introduces age as an important intervening

variable in any relationships between drinking and socio-demographic background variables.

Secondly, it means that the variation between age groups in cross-sectional data is largely an historical one, rather than a stable uniformity caused by the social, psychological and physiological aspects of aging.

Thirdly, this observation helps to understand the growth in the number of drinkers in an important way. This can be brought out even more clearly by comparing the same birth cohort in K46 and in S76. Such a comparison is technically possible for one cohort only, namely for those born in 1916-1925.

Table 7 presents the life-long and month-long abstinence rates for this cohort in 1946 and in 1976. Unfortunately this comparison cannot be made, for technical reasons, for 1969, when this age group could be expected to show the lowest rate of month-long abstainers as a consequence of the 1969 legislation (after that, old age may have taken its toll to reduce the number of regular drinkers).

Table 7 shows that this cohort has remained at a very stable level of abstinence ever since it was in its twenties. This in itself is not surprising in view of the experiences in the life-cycle of this generation. Born in the Prohibition years, it reached drinking age in the thirties when alcohol consumption was at a very low level (Kallenautio 1979, 26). It waged a war during its young adulthood, and then gave birth to the post-war baby boom, raising a large number of children under the economic strain of the reconstruction period.

Table 7. Last drinking occasion by those born in 1916-1925 in 1946 and 1976.

	never	month ago or more	more recently
K46 (20-29 years)	17	28	55
S76 (50-59 years) (N=467)	14	28	58

This generation also entertains opinions of morally and socially acceptable conduct that many younger people now consider conservative. It is no surprise that alcohol is on the list of sensitive issues for them, while perhaps not totally rejected.

The generation gap

It is more important that the inter-generational differences open up a new interpretation of the relationship between abstinence and living conditions.

In the foregoing sections it has been observed that sex differences have become weaker, the difference between farmers and other occupations has grown and the difference between rural and urban residents has remained the same. The inter-generational differences especially pointed out by table 7, are crucial for an interpretation of these results.

I already surmised that it may be the growing average age of the rural and farming population that explains why these groups are still more abstinent than others. On the basis of table 7 this becomes quite clear: it is not age per se but the generation gap that explains the result.

This is further demonstrated in tables 8, 9 and 10, which show that among the post-war generation hardly any differences between the sexes, the rural and urban population and the farming and non-farming population can be discerned.

This is very important. The post-war generation not only is different from their parents. More than that it is also uniformly so across the whole society. This puts the whole process of the social and structural change in society in a new light, especially as it concerns drinking (and maybe many other aspects of life as well).

The change in living conditions as such has often been mentioned as one of the causes of the exceptionally rapid increase in alcohol consumption in Finland (for example Mäkelä & Österberg 1975; Komiteamietintö 1978:33, 88-91).

The inter-generational difference in abstinence rates specifies this hypothesis and gives it a slightly new meaning. The most important consequence of the structural transformation seems

Table 8. Last drinking occasion by men and women over 19 years in 1976 by age.

		never	month ago or more	more recently	N
20-29	men	2	8	90	340
	women	3	19	78	356
30-49	men	3	14	83	529
	women	10	20	70	484
50-64	men	5	27	68	304
	women	25	33	42	374
65-69	men	10	19	71	102
	women	37	35	28	112

Table 9. Life-long abstinence rates among farmers and the total population by age in 1976.

age	farmers	N	total population	N
20-29	3	34	3	696
30-49	13	127	6	1 013
50-64	26	182	16	678
65-69	79	72	23	214
total	21	415	9	2 601

Table 10. Life-long abstinence rates among urban and rural residents by age in 1976.

age	urban	N	rural	N
20-29	3	449	3	247
30-49	6	594	7	419
50-64	14	370	19	308
65-69	23	132	24	82
TOTAL	8	1 545	11	1 056

to be that the post-war generation entered a different society very differently equipped as compared to their parents thirty years ago. The post-war generation was thrown into living conditions that were unfamiliar to their parents and to themselves, and in which they could not apply the patterns of ordinary life acquired in childhood from parents.

It is important that the large birth cohorts after the war matured into adulthood simultaneously with the economic transition period in the 'sixties. There is no need to describe the transition in detail here. (Examples of different types of descriptions are Waris 1973; Seppänen, Gronow et al. 1977; Järvelä-Hartikainen & Taponen 1979; Roos & Roos 1978; Living Conditions 1950-1975). Table 11 is enough to show its magnitude and the time it set in. From 1950 to 1970 the labour force occupied in primary industries was reduced by half a million persons, of which more than half had been so called assisting family members, i.e. wives and children of farmers. Most of this reduction occurred in the course of the 1960's (Alestalo & Toivonen 1977, 24).

The magnitude of the economic transformation is given comparative perspective by Diagram 1, which shows that Finland has been among those capitalist countries in which industrialisation has not yet been fully carried out.

This development has implied that precisely the post-war generations have been tossed around by economic forces. This can be said literally, since not only occupational but also the geographic structure has changed. Gronow et al. describe these

Table 11. Persons occupied in agriculture, forestry and fishery 1950, 1960 and 1970. In thousands.

year	employers entre- preneurs	managers	employees	assisting family members	total
1950	292	15	185	420	912
%	32.1	1.6	20.2	46.1	100.0
1960	282	14	138	287	721
%	39.1	1.9	19.1	39.9	100.0
1970	209	13	66	140	429
%	48.7	3.1	15.5	32.7	100.0

changes by calling them the Great Migration, on the basis of the statistics in table 12.

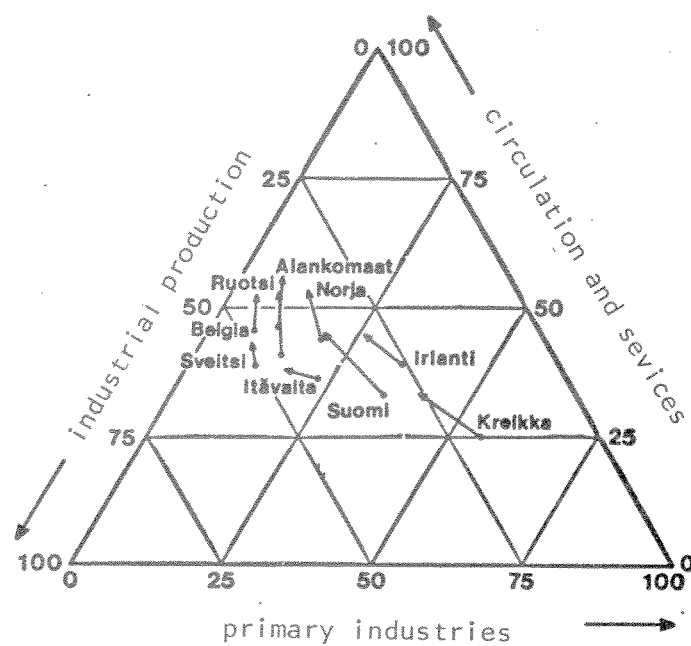
Generations are separated not only by different education, different occupations, and different experiences, but also by kilometers.

The sharp-edged generation gap has, of course, drawn the attention of social scientists in many contexts. Klaus Mäkelä, for example, pointed out in his analysis of attitudes towards alcohol and opinions on alcohol policy, that the turbulence in the public debate in the sixties was connected to the emergence of the post-war generation in public life. Within a very short time it began to occupy important social positions. Mäkelä illustrates this by statistics on the public broadcasting corporation, which had 425 budgeted personnell positions in 1950 but in 1960 these were 835 and in 1970 as many as 3 189. These positions had to be filled with young people because there were no experienced professionals available in the country.

This is of particular interest here, because it may explain why the liberalism concerning many moral and social issues, alcohol among them, spread among the population so rapidly and efficiently.

It is well to underline, however, that the generation gap

Diagram 1. Proportion of labour force employed in primary industries, construction and industrial production, and in circulation and services 1962-1972. Percentage scale. Selected countries.



Source: Gronow et al. 1977, 476

Alankomaat	=	Netherlands
Ruotsi	=	Sweden
Norja	=	Norway
Belgia	=	Belgium
Sveitsi	=	Switzerland
Itävalta	=	Austria
Suomi	=	Finland
Irlanti	=	Ireland
Kreikka	=	Greece

Table 12. Net out-migration and population movements within the country 1891-1910 and 1915-1970 (statistics in brackets are uncertain estimates).

	persons per year	persons per 1 000 mid-year population
net out-migration		
1891-1900	4 100	1.6
1901-1910	9 400	3.8
1951-1955	6 500	1.6
1956-1960	7 300	1.6
1961-1965	11 000	2.4
1966-1970	(22 000)	(4.8)
migration within the country		
1891-1900	62 000	24
1901-1910	74 000	26
1951-1960	172 000	38
1960-1969	214 000	47

Source: Gronow et al. 1977, 477

is not merely a matter of attitudes and opinions. Tables 13-16 point out how different in 1976 is the life of the generations, particularly those born in 1916-1925 and 1946-1955. These tables are not accurate in the sense that age itself rather than the year of birth determines for example how long one is likely to have lived in the present community of residence. Educational and occupational differences are, however, very stable among adults, and they are very wide indeed.

However different the generations are, the generation gap itself does not, of course, explain the general changes in the way of life any more than the rapid growth in overall alcohol consumption. The sharpness of the generation gap is, on the contrary, the result of the temporal coincidence and abruptness of many aspects of the social change.

Table 13. Percent of population living in rural and urban communities in S76 by age.

community	15-19	20-29	30-49	50-59	60-69	total
urban	46.1	64.2	58.6	53.8	59.1	58.3
rural	53.9	35.5	41.4	46.2	40.9	41.7
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
N	234	696	1 013	467	425	2 835

Table 14. Completed education by age in S76. In percent of total population.

education	age					
	15-19	20-29	30-49	50-59	60-69	total
less than elementary school or don't know	3.0	3.7	6.1	13.9	29.9	10.2
elementary school (6 years)	26.5	30.3	53.7	63.6	50.8	46.9
less than full high school	59.4	40.1	22.6	10.9	11.8	26.4
full high school (12 years) or more	11.1	25.9	17.5	11.6	7.1	16.5
TOTAL	100.0	100.0	99.9	100.0	99.6	100.0
N	234	696	1 013	467	425	2 835

Table 15. Length of continuous residence in the present community by age in S76 (%).

years of residence	age					
	15-19	20-29	30-49	50-59	60-69	total
less than 1	13.2	13.5	3.4	1.3	1.4	6.0
1	4.3	8.6	2.9	0.9	1.2	3.8
2-5	3.4	16.2	9.5	2.6	2.6	8.5
6-	79.1	61.6	84.3	95.3	94.8	81.7
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
N	234	696	1 013	467	425	2 835

Table 16. Occupation by age in S76 (%).

	15-19	20-29	30-49	50-59	60-69	total
unclassified	10.7	9.2	1.9	3.8	3.8	5.0
farmers	16.2	4.9	13.4	27.4	32.0	16.0
farm workers	2.6	1.4	2.9	1.1	3.1	2.2
industrial workers	42.7	39.8	40.6	38.1	39.3	40.0
lower white collar	17.1	35.6	26.7	18.2	15.5	25.0
upper white collar	10.7	9.1	15.4	11.4	8.7	11.8
TOTAL	100.0	100.0	100.1	100.0	102.4	100.0
N	234	696	1 013	467	425	2 835

This coincidence may partly explain, however, why alcohol consumption rose so quickly. Different people had entered the drinking scene, and once they had adopted the new habit, it was not controlled by the more reserved attitudes of the parent generation.

One further comment on the inter-generational differences in drinking patterns is needed. Although the economic transition was realized mainly in the lives of those who were born after the war, it did not leave the older people untouched. This will be studied in the next chapter in which the results obtained so far will be qualified by looking more closely into the process through which the abstinence rates have declined.

3. AGE AT FIRST DRINK 1946-1976

By sex, residence and occupation

Age at first drink was asked in all four of the surveys that are being analysed here. I shall describe the responses for K46 and S76 only, since the analysis would be unduly complicated if all four surveys were included in the tables. M68 and M69 would probably not add much to the analysis anyway. In K46 the question was asked: "At what age did you take alcoholic beverages for the first time except for medicine or as communion wine?" In S76 the question was simply: "At which age did you take some kind of alcoholic beverage for the first time?"

The responses to these questions are very well comparable. Of course, in both surveys the responses of the elderly tend to be inaccurate and unreliable.

Information on age at first drink is retrospective: it tells about the past and not about the present. Here such information is useful for two purposes: (a) it can be used to reconstruct historical life-long abstinence rates and (b) it gives more accurate information on the reduction of life-long abstinence rates in the different population segments.

The first possibility is interesting especially because in S76 both year of birth and age at first drink are recorded by years and not by classes of years. In principle, this material can be used to construct annual series of life-long abstinence rates for most of this century for as many population categories as desired. In practice, the number of cases would run short, and the replies by old people cannot be taken at face value. I shall explain in a moment the results of such an analysis that was performed by Simpura for men and women by four-year time intervals.

Table 17 displays the results for the total population and by sex.

It can be seen that the age when the first drink was taken has lowered more than the proportion of life-long abstainers. As observed earlier about the tables on life-long and month-long abstainers, also here it can be seen that changes have been

Table 17. Age at first drink in 1946 and 1976 by men, women and the total population over 19 years. Cumulative percentages of all men, women and the total population.

age at first drink	K46			S76		
	women	men	total	women	men	total
-15	3	13	8	17	33	25
16-17	10	31	20	15	58	45
18-20	25	64	44	58	86	72
21-	57	88	71	86	96	91
never	31	5	19	15	4	9
don't know	12	7	10	-	-	-
TOTAL	100	100	100	100	100	100
N	..	..	..	1 326	1 275	2 601

drastic among women and the differences between men and women have become less dramatic, although the average age at which women first get in contact with drink is still higher than that of men.

Another interesting observation can be made by eliminating the variation in the number of those who never have drunk alcohol. In this way we can see that women have taken their first drink at a later age than men both in 1946 and 1976, although the difference in life-long abstinence rates has almost disappeared in 1976.

Table 18 displays the same information by rural-urban residence. Note again the striking similarity of urban and rural populations both in 1946 and in 1976. It may be worth observing that the age at first drink among those who had sometimes drunk was not lower in the country than in towns neither in 1946 nor in 1976, although the proportion of life-long abstainers was slightly greater in rural areas in both years.

Furthermore, the small difference between town and country has not changed essentially, although one could have expected the difference to grow as it did between the agricultural occupations and others, as a result of the migration of young people to towns and to other occupations. Part of the explanation is cultural

Table 18. Age at first drink in 1946 and 1976 by rural-urban residence. Cumulative percentages of total population over 19 years living in rural and urban communities.

age at first drink	K46		S76	
	rural	urban	rural	urban
-15	8	8	24	26
16-17	19	22	42	46
18-20	42	47	68	74
21-	68	79	89	92
never	20	14	11	8
don't know	12	7	-	-
TOTAL	100	100	100	100
N	..	..	1 056	1 545

diffusion: the growing overall similarity of rural and urban Finland.

This can be seen from the figures in the table. The proportions of those who had contacted alcohol before they were 20 years old differed by 5 percentage points in 1946 and by 6 percentage points in 1976. This is an irrelevant change. However, the proportions of those who have contacted alcohol after the age of 20 was 6 percentage points larger in towns than in the country in 1946, whereas it was 3 percentage points smaller in towns than in the country in 1976. This accounts for the slight reduction in the difference between the proportions of life-long abstainers. Since those who have first made contact with alcohol at the age over 20 years are adults, we may conclude that there has in fact been cultural diffusion among older people: the rural grown-ups have increased their drinking more than urban grown-ups. In other words, it was customary in 1946 that many urban people began to drink in their adult years. In 1976, on the other hand, this could happen to rural people, but if townspeople had not taken to drink by the age of 20 they were likely to remain sober for the rest of their lives.

The percentage differences in this table are very small, however, and therefore the result should be considered as tentative only.

This tentative conclusion is supported by an analogous finding that emerges from the next table (19) on age at first drink by occupational groups. In 1946 the farming population differed from the other occupations so that the proportion of life-long abstainers was larger. However, there was no big difference in the proportion of those who had taken their first drink under the age of 21.

In 1976 the difference in life-long abstinence rates remains, as already observed in the previous chapter. In addition, there is now a difference also in the proportions of those who had taken a first drink under the age of 21.

This means, as in the case of the urban-rural comparison above, that whereas the abstinence rates among other occupational groups have mainly lowered through lowering average age at first drink, the farmers have not only begun to drink at an earlier age but also older farmers have gradually started to drink.

This indicates that although the inter-generational differences is a major type of recruiting new drinkers from all population categories, there has also been a gradual diffusion of the drinking custom to the ranks of old generations of the traditionally abstinent population categories.

Age at first drink by age groups

This is further clarified by an examination of age at first drink by age groups - or rather birth cohorts, since this analysis helps to reconstruct the disappearance of abstinence more accurately than simple comparisons of the number of abstainers in each age group in two major surveys. Unfortunately, the analysis is made rather difficult by the uneven and coarse age groups applied in the 1946 survey. Table 20 presents the starting point in this analysis.

Let us again first comment on the data from K46. The most interesting observation revealed by them was already noted by Kuusi: those born in 1916-1925 have taken their first drink at a lower age than those born before them. This is intriguing since, as noted earlier in this report, this age group nevertheless does not differ from the older generations in the proportion of life-

Table 19. Age at first drink by occupational groups in 1946 and 1976. Cumulative percentages of total respective occupational groups. Population over 19 years of age.

age at first drink	occupational group											
	K46						S76					
	1	2	3	4	5	6	1	2	3	4	5	6
-15	-	7	7	9	7	8	37	18	14	25	26	30
16-17	-	17	23	21	19	20	55	31	33	47	46	50
18-20	-	41	40	44	47	44	75	56	70	73	74	81
21-	-	67	67	73	75	78	91	79	-	91	95	97
never	-	23	23	17	16	10	9	21	14	9	5	3
don't know	-	10	10	10	9	12	-	-	-	-	-	-
TOTAL	-	100	100	100	100	100	100	100	100	100	100	100
N	117	415	57	1 033	670	309

- Occupational groups:
1. unclassified or unknown
 2. farmers
 3. farm workers
 4. industrial workers etc.
 5. lower white collar
 6. upper white collar

Table 20. Age at first drink by age groups in 1946 and 1976. Cumulative percentages of the respective age groups.

age at first drink	age group									
	K46					S76				
	20-20	30-49	50-64	65-	15-19	20-29	30-49	50-59	60-64	65-69
-13	10	8	8	5	37	17	10	8	8	6
14-15					73	46	21	15	15	11
16-17	26	19	18	14	90	74	41	28	28	23
18-20	60	42	34	30	91	95	72	58	56	47
21-24	73	62	52	45	-	97	83	71	66	57
25-30	74	71	63	57	-	-	91	80	76	64
31-	74	74	67	61	-	-	93	86	84	76
never	17	16	22	26	9	3	7	14	16	24
don't know	9	10	11	13	-	-	-	-	-	-
TOTAL	100	100	100	100	100	100	100	100	100	100
N	..	..	..	..	234	696	1 013	467	211	214

long or month-long abstainers. It was also pointed out earlier, that this birth cohort has not relinquished its life-long or month-long abstainers to the ranks of more regular drinkers to any large extent.

This indicates, that this is the first generation who has learned its drinking patterns at a relatively young age, although it still has a fairly strong abstinent segment, which is not to surrender to drink even later in life. In a moment we shall see that the latter statement may not be quite strictly true, after all.

That those born in 1916-1925 are the first generation who started drinking early in life is brought out even more clearly if age at first drink is analysed only among those who did ever drink. Excluding life-long abstainers, about one half of the two oldest age groups in 1946 had taken their first drink by the age of 20. In the 30-49 group this proportion was no more than slightly above one-half. In contrast to this, the 1916-1925 age group have started early if at all: 4/5 of the users among them have taken their first drink by the age of 20.

The low average, compared to earlier birth cohorts, is not explained by their young age in 1946. This can be seen by investigating the same birth cohort in 1976 in the same table. Only a small number of those who had not drunk by 1946 have done so later. (This statement is conditional to the low reliability of this information as received from old people.)

Drinking by adolescents seems, in the light of the preceding observations, to be a phenomenon that began to emerge among those who were born in 1916-1925 and who reached their adolescence after the Prohibition and during and immediately after the war (approximately 1930-1946). Kuusi (1948, 111) estimates that probably more than 25 % of the males in this age group had their first drink in the army or in the war.

Commenting on these data, Kuusi wondered in worry: "It is too early now to assess whether this practice of boozing at a premature age will be found as a transitional aftermath of the war, or will it develop into a permanent custom. In any case, this is a phenomenon that deserves continuous attention." (108)

After thirty years, the answer is somewhat distressing. Boozing at a premature age did not only develop into a permanent

custom. It developed into a practice of boozing in childhood. In fact, in 1976 drinking at the age of 15-19 was no less common than at the age of 20-29, if measured by the proportion of those who had ever taken a drink. On the other hand, there is some consolation in the fact that few of the 1916-1925 generation who had not contacted alcohol by 1946 did so at a later age. Most of them have remained relatively infrequent drinkers.¹

It is possible to specify these results further on the basis of a retrospective analysis by Jussi Simpura (1977), in which he has cross-tabulated age at first drink with the year of birth in his 1976 data. He has done this by sex, which gives us interesting additional information.

Tables 21 and 22 are reproduced from Simpura's article. These tables are rather complicated, but they give rise to a number of fascinating observations.

Let us start by commenting on the table on men. First of all, the bottom row indicates that inter-generational differences in life-long abstinence were small in 1976. This is an important specification to the findings presented above for both sexes, because it implies that most of the inter-generational differences in life-long abstinence are due to women (see also table 8). Furthermore, diameter A indicates that age at first drink has in fact been relatively constant for all except the post-war generations. The birth cohorts of immediate pre-war years and especially those of post-war years differ from the earlier birth cohorts in that they have had their first drink at a very young age, as can be seen following diameters B and C.

The first contact with alcohol by the post-war birth cohorts has for the most part taken place before the legislation changed in 1969. Some of this transition towards early drinking did take place in the context of the new legislation and after it, but it is not possible to distinguish the effects of the change of the system from other causes. In any case, the new legislation did not reduce the already very small number of life-long abstainers among older men born before 1946.

¹ It must be noted here that since 1973 the age at first drink has again begun to rise (Ahlström 1979).

Table 21. Year of first drink by birth cohorts. Cumulative percentages of each cohort. Men.

year of first drink	year of birth															
	1906—1909	1910—1913	1914—1917	1918—1921	1922—1925	1926—1929	1930—1933	1934—1937	1938—1941	1942—1945	1946—1949	1950—1953	1954—1957	1958—1960		
1906—09	0															
1910—13	0	0														
1914—17	0	0	0													
1918—21	5	1	1	0												
1922—25	43	9	6	2	0											
1926—29	82	52	17	6	2	0										
1930—33	90	81	50	13	10	1	0									
1934—37	91	85	81	43	15	3	0	0								
1938—41	91	88	91	85	60	10	4	0	0							
1942—45	91	89	91	90	93	54	12	5	1	0						
1946—49	91	90	93	92	95	88	62	13	5	2	1					
1950—53	91	90	94	94	95	93	91	53	14	7	2	1				
1954—57	91	90	96	94	97	95	95	89	67	24	6	1	0			
1958—61	91	90	96	94	98	96	95	93	90	69	20	8	0	0		
1962—65	91	90	96	94	98	96	96	95	94	91	73	34	7	3		
1966—69	91	90	96	94	98	96	96	96	96	96	96	84	41	16		
1970—73	91	90	96	94	98	98	96	97	96	96	98	96	95	69		
1974—76	91	90	96	94	98	98	96	97	96	96	98	96	98	89		
N	79	73	68	93	93	110	111	107	103	98	129	145	120	64	64	

Source: Simpura 1977, 100

Table 22. Year of first drink by birth cohorts. Cumulative percentages of each cohort. Women.

year of first drink	year of birth															
	1906—1909	1910—1913	1914—1917	1918—1921	1922—1925	1926—1929	1930—1933	1934—1937	1938—1941	1942—1945	1946—1949	1950—1953	1954—1957	1958—1960		
1906—09	0															
1910—13	1	0														
1914—17	1	1	0													
1918—21	5	2	1	0												
1922—25	9	4	2	4	0											
1926—29	25	7	4	6	1	0										
1930—33	33	23	15	7	2	2	0									
1934—37	38	35	36	17	4	2	1	0								
1938—41	42	45	49	42	18	7	1	2	0							
1942—45	42	50	56	58	49	26	6	6	0							
1946—49	46	56	57	61	63	51	27	12	3	1	0					
1950—53	47	59	61	70	70	70	55	30	10	2	3	0				
1954—57	47	60	65	72	72	76	72	61	31	9	6	1	0			
1958—61	48	64	65	72	75	80	79	75	73	41	16	3	2	0		
1962—65	49	65	66	74	77	82	83	83	86	77	59	22	3	3		
1966—69	55	67	68	75	78	83	84	91	92	87	93	79	33	11		
1970—73	56	69	69	76	79	83	89	94	92	89	95	97	91	64	C	
1974—76	58	70	70	78	80	84	89	94	92	89	96	97	98	81	B	
N	85	105	108	89	99	100	96	89	112	87	137	151	120	64	A	

Source: Simpura 1977, 99

The table for women is even more interesting. It shows that women born after 1917 (the data for those born in 1906-1909 is very unreliable) have deserted abstinence-from-birth increasingly, and the more so the younger they are. It is interesting, however, that also older women have gradually thrifted away from the life-long abstinent category, even at a mature age. This accounts for the slight reduction in the rate of life-long abstinence among those born in 1916-1925 that we discussed earlier (table 7 and table 20).

Diameters A, B and C point out the drastic reduction in the age at first drink. The reduction is very clear between those born before and after 1946. Among the latter more than 90 percent have tasted alcohol by the age of 23 or earlier, which is a proportion almost as large as among boys. Note also the abrupt change in 1969 among the post-war birth cohorts.

Again we can see that the difference between boys and girls in the post-war generations has almost disappeared; a finding that confirms the results presented earlier (table 8).

It can be re-emphasised that although some older women took a first drink as early as in the fifties, the major change is brought about by those who were born after the war. This generation began at least experimenting with alcohol in the course of the 'sixties, when also the total consumption curve began to rise. Since the post-war birth cohorts were large, this implies that the whole alcohol-using population has become younger. However, the rise in overall alcohol consumption was very slow and moderate before 1969. It is therefore probable, that neither those women who then began to drink at a mature age nor the youth who began to drink at a very young age consumed very large amounts annually at first. The boom in consumption began only later, when the post-war generation reached adulthood, began to earn money and became independent in other ways, too, of their parents.

Cultural diffusion

One important additional observation on the recruitment of new drinkers emerged from the examination of tables concerning age at first drink: the recruitment of drinkers has happened differently from among women than from among men. For men it has mainly been

a matter of a general lowering of the age at first drink, which has probably taken place in all population categories. For women, on the other hand, also cultural diffusion accounts for part of the growth in the drinking population in addition to the new drinking generation that emerged after the war.

As abstinence has been more common among rural women it is important to look at especially this group to see how the diffusion of the drinking habit to the ranks of older people has taken place.

This is done in the next table (table 23), which utilises reported data from the 1968 and 1976 surveys. Although the table is not arranged exactly by birth cohorts it is accurate enough to show that even among the older female age groups (over 29 years) year-long abstinence rates have reduced considerably at the time of and after the legislative reform. These changes have been very strong in the rural country. Among men this late start has been of minor significance, and that only in the rural areas.

On the basis of the statistical results obtained so far the recruitment of new drinkers in Finland has taken place in two major ways. First, and most important, the post-war generation has begun to drink at a very early age uniformly in all population groups, largely even before the reform of 1969. Secondly, the rural (farming) population, especially women, who have been the largest pocket of total abstinence, have begun to drink largely later than 1968, even very late in their individual life cycle.

It would be very interesting to know how the rural women have become drinkers and what circumstances have encouraged them to do so. The best way to find out would be life histories of older rural women who now drink. Pending such material, some speculations are possible also in the light of our survey material.

Two related possibilities exist. One of them is that whereas men have never felt any normative commitment to absolute temperance in post-war Finland, such cultural and in a way subjective determination of female abstinence is rather strong, especially in the country. For example, Kuusi pointed out from his data that women were more often willing to report themselves as total abstainers than really was justified by their actual (self-reported) drinking behavior. In 1946 women seemed to appreciate temperance as an ideal even more than as a practice (Kuusi 1948, 42).

Table 23. Abstainers (no alcohol for a year) by age and rural-urban residence in 1968 and 1976.
In percent of the total respective population category.

		15-17	18-19	20-29	30-39	40-49	50-59	60-69
URBAN								
women	1968	(0)	(0)	7	31	36	37	58
	1976	18	0	4	11	16	23	41
men	1968	(24)	(4)	3	6	4	9	10
	1976	(8)	(7)	4	5	7	9	22
RURAL								
women	1968	(67)	(44)	42	58	54	55	74
	1976	23	6	8	12	22	39	56
men	1968	54	21	6	14	11	25	27
	1976	16	(4)	4	10	8	12	14

Sources: Mäkelä 1969
Simpura 1977

Women abstainers also give more frequently ideological and moral reasons for their abstinence than men (Mäkelä 1969; Simpura 1977; see also Chapter 4 of this report).

Then there is the other aspect, namely the "solid facts of life". Especially rural women have of old had little opportunity to drink. They have not possessed money that they could use for their individual pleasures; they have been bound to the house, children and animals; and they have had little leisure for any kind of recreation. As Jallinoja (1979) has shown, the Great Migration caught rural women somewhat later than the big rush in the 1960's. When it did it gave them jobs, money and freedom (often also even more work to do).

Tables 24a and 24b give us a glimpse of what happened. From the frequencies it can be seen that the proportion of employed adult women has grown in the country from about one third to about one half whereas in towns no essential change is visible. From the percentages it can be seen that not only has the number of employed adult women grown, but also drinking among the employed has increased at the expense of abstinence. In 1968 even the employed adult women were abstainers by one half.

It seems that in rural Finland there has been a rather strong normative pressure for women to abstain and that this pressure was to a great extent a matter of sex roles and not of drinking opportunity. In view of this, my statistical keyhole reveals - although only obscurely - a genuine cultural contagion. Since young people have learned to drink uniformly at an early age in all population categories, it has been difficult to maintain a crossly prohibitive attitude towards drinking by the mothers also. A further incentive to relax these norms came from the state that officially approved alcohol into everybody's use by the legislation of 1969.

How different are abstainers?

Up to this point it has been established that new drinkers have been recruited in two ways: First, and most important, the post-war generation has begun to drink at a very early age uniformly in all broad segments of the population in and after 1969, but largely already before that year. Secondly, women, even in the

Table 24a. Abstinence rates (no alcohol for a year) among rural women born before 1939 by employment in 1968 and 1976.

	1968		1976	
	%	N	%	N
employed, temporarily unemployed or student	53	57	25	163
retired	(68)	19	51	117
family member	61	94	42	55
TOTAL	59	170	37	335

Table 24b. Abstinence rates (no alcohol for a year) among urban women born before 1939 by employment in 1968 and 1976.

	1968		1976	
	%	N	%	N
employed, temporarily unemployed or student	28	80	11	261
retired	(71)	21	44	150
family member	40	48	38	55
TOTAL	38	149	25	466

country, have begun to drink even at a later stage in their life-cycle and this has happened all along the 1970's.

What has been the result? In what ways and to what extent abstinence and drinking are now associated with external living conditions as compared to earlier times? This kind of analysis is needed to complement our understanding of how drinking and abstinence are related to the most solid facts of life on the one hand and to what extent they depend on individual idiosyncracies on the other hand.

For this purpose a change in perspective is needed. Instead of asking "Who is likely to abstain?" and "How are new drinkers recruited from among abstainers?" I am now asking "How do the abstainers differ from drinkers?" and "What has happened to this difference?" To put it more abstractly, I am now going to look at the social distance between abstainers and drinkers. It could be expected that in a society where drinking is uncommon drinkers would appear to be somehow deviant in the sense that they have a similar background, similar life styles and similar views of various things, whereas abstainers would be a group that represents the social composition of the population in a more balanced way.

On the other hand, where drinking is generally accepted and practiced, abstainers could be expected to consist of people with some relatively uncommon social trait or of those belonging to some particular population groups.

This in fact seems to be true of many societies. According to a series of surveys undertaken by the Ansvar Insurance group in Sweden, Norway, Denmark, Finland, Australia, German F.R., France, Belgium, Japan, U.K. and the Netherlands, abstainers usually tend to be "underdogs" - excuse the term -, i.e. women, old, poor, retired or bluecollar, and not car-owners. Furthermore, they lead a more cautious, quiet and inactive life than drinkers (Armyr 1978).

Similar signs of social isolation or inactivity of abstainers can be detected from two Finnish local studies of alcohol use. Kuusi (1958) found in his study of alcohol use in rural towns and villages that abstinence was less common among the mobile and active (movies, dancing, sports, visits to town) and more common among the passive and the church-goers. On the other hand, those

who belong to associations and attend meetings are, in Kuusi's rural sample from 1951, more likely to abstain. Sariola found that in Lapland in the early 1950's abstainers and occasional drinkers were less active readers, dancers and trade union members than drinkers and especially regular drinkers. Instead, abstainers were more active church-goers (Sariola 1956).

Some results on the possible social isolation of abstainers will be presented in the following tables computed from the 1968 and 1976 national data. For the most part the 1946 survey is not amenable to this analysis since it only exists as percentage tables. The 1968 survey was chosen as a starting point since it represents the era of low consumption level better than the 1969 survey.

As the purpose of the following analysis is to present a many-sided profile of the abstaining sub-population, as many descriptive variables are used as possible. Ideally, three groups of variables are of interest here: (a) the usual socio-demographic background variables; (b) data on peoples' other activities besides drinking and on their opinions about and attitudes towards different things; (c) abstainers' individual reasons for non-drinking.

Unfortunately, group (b) is not well covered by the surveys: only data on smoking and attitudes toward alcohol can - somewhat uncomfortably - be considered to belong to this group.

Some indications of individual reasons for abstinence are available in K46 and they will be referred to.

The socio-demographic variables that allowed comparative statistical treatment in M68 and S76 are: age, education, employment, occupation, marital status, rural-urban residence and income. Income is not, however, actually comparable since in M68 it refers to family income and in 1976 to respondents' own income. Furthermore, the 1968 income variable was classified into 9 groups to which the exact mark values of S76 could be adjusted only very crudely. For this reason income is not of great importance and could not be used in comparative cross-tabulations.

The classifications of these variables are as follows:

- age: year of birth
- employment: (1) employed; (2) temporarily unemployed; (3) retired;
(4) student; (5) family member
- occupation: classification of the official survey of housing and employment (Asunto- ja elinkeinotutkimuksen ammatti-
luokitus)

<u>income:</u>	1968: ten classes (monthly family income) 1976: marks (respondent's own monthly income)
<u>education:</u>	1968: (1) less than elementary school - (6) full high school + at least 2 years of higher education 1976: (1) less than elementary school - (7) full university degree or more
<u>marital status:</u>	1968: (1) married; (2) unmarried; (3) separated; (4) divorced; (5) widow 1976: the same as above plus (6) common law
<u>residence:</u>	(0) urban; (1) rural

Social distance between abstainers and drinkers by population categories

To get a very crude and quick picture of the social differences between abstainers and drinkers, a regression analysis was first performed separately for men and women in 1968 and 1976 with the socio-demographic variables as the independent variables and abstinence-drinking as the dependent variable.

For this purpose, employment, occupation and marital status had to be dichotomised into dummy variables. Employment was classified to distinguish between the active population (employed, temporarily unemployed, students) from the inactive (retired, family member). Occupation was classified to distinguish farmers and farm workers from the others, and marital status was classified to distinguish married or common-law couples from those living without a spouse.

Since correlations between dichotomised variables tend to be lower than between quantitative variables, also age, income and education were dichotomised to make them technically equal with the other explaining variables. Thus the whole set of independent variables as well as the dependent variable were dichotomic. The cutting point of age was 55 years. Income was cut off at the lowest decile in 1976 and at the two lowest classes¹ in 1968. Education was

¹ 18 % of men and 26 % of women fell into this class.

reclassified into at most full elementary school and more than elementary school.^{1,2}

The essential results of the regression analysis are summarised in tables 25 and 26.

First, a brief comment on the order of variables in the models is necessary. Multicollinearity of the independent variables was found to be strong and this distorts the clarity of the models in the sense that the order in which the variables are selected (on the criterion of largest partial correlation) is somewhat arbitrary. Therefore the relative importance of the variables is not unambiguously indicated by the order of variables and by the increase in R^2 when a new variable has been added to the model. The zero-order correlations are better indications for that purpose and they are therefore included in the tables. Reading the tables we can make the observation that old age, agricultural occupation, rural residence and lack of employment are characteristic of abstainers, as could be expected. Instead, marital status and income have much less to do with abstinence. Furthermore, it is interesting to observe that education covaried strongly with abstinence among women in 1968 but this relationship has become much weaker in 1976.

The interesting figures are most of all the multiple correlations, which show - in technical terms - that for women the "probability" of abstinence "depends" much more strongly on socio-demographic background than for men. In a substantial sense this means that abstinence among women is much more strongly associated with living conditions, whereas among men abstinence is above all an individual choice - or an individual necessity - that is not very closely connected with living conditions.

The second important observation brought to light by the analysis is the decrease in the multiple correlations, both among men and women, from 1968 to 1976. In other words, abstinence is less determined by external living conditions in 1976 than it was in 1968. In a way this is surprising, since a large reduction in

¹ All classifications were made so as to maximise the degree of association between abstinence and the other variables.

² A comparison of results with dichotomised and quantitative variables for age, education and income shows only minor differences in the order of explaining variables in the models but no essential differences in the multiple correlations.

Table 25. Regression analysis of abstinence with dichotomized socio-demographic variables.

WOMEN		
variable	1968 multiple cor- relation when variable added to model r	1976 multiple cor- relation when variable added to model r
education (low)	0.37	0.369
employment (inactive)	0.42	0.303
rural residence	0.45	0.274
old age	0.46	0.207
agricultural occupation	0.47	0.119
marital status (no spouse)	0.48	0.036
		employment (inactive)
		old age
		agricultural occupation
		marital status (no spouse)
		education (low)
		rural residence
		0.34
		0.39
		0.42
		0.42
		0.42
		0.42
		0.340
		0.332
		0.259
		0.057
		0.207
		0.116

Table 26. Regression analysis of abstinence with dichotomized socio-demographic variables.

MEN	
1968	1976
multiple cor- relation when variable added to model	multiple cor- relation when variable added to model
variable	variable
r	r
rural residence	employment (inactive)
0.19	0.14
employment (inactive)	old age
0.22	0.16
education (low)	education (low)
0.23	0.17
old age	income (low)
0.24	0.17
marital status (no spouse)	
0.24	
agricultural occupation	
0.25	

the number of abstainers could be expected to lead to greater social distance between abstainers and drinkers. In other words, one could expect that those who do remain abstinent among a great drinking majority are in some way special and could be found mostly in the traditionally abstinent population categories. But let us save any further comments on this until the results will be qualified in an analysis of the individual variables.

To investigate in closer detail the social distance between abstainers and drinkers, simple two-variable tabulations were arranged and tested with χ^2 . To measure the degree of association in the tables, a coefficient of contingency (ϕ^2) was also calculated (Reynolds 1977, 41). The next table presents a summary of the ϕ^2 coefficients and the tests.

This analysis again shows that the association between abstinence and the socio-demographic variables is stronger among women than among men. On the other hand, the second result of the regression analysis discussed above is specified: For women, the coefficients of contingency increase for all other dependent variables except education and rural residence. For men, on the other hand, the result is similar to the regression analysis: the association becomes even weaker 1968-1976 with respect to all socio-demographic variables.

From tables 28-33 these results can be studied in detail. A few comments on each are needed here.

Let us start with the "deviant" variables among women: education and rural residence. Elementary education became obligatory in 1922. Those born after 1915 were then brought under the obligation to attend elementary school, and as was already seen from table 14, the 1976 survey shows a marked difference in basic education among those born before and those born after that year. In 1968 the number of those who were born before 1915 was larger than in 1976, and it is quite understandable that lack of elementary education was characteristic to those women who also in other respects were most likely to abstain. Why it is exactly education that is more strongly associated with abstinence than any other of our variables in 1968 is not clear without further elaboration, but this is not crucially important for my purposes. It is more interesting to observe from table 28 that the difference between abstainers and drinkers has grown as regards higher education: this part of the table conforms to the general pattern.

Table 27. Coefficients of contingency (ϕ^2) for tables 28-33 and 36.

variable	MEN			WOMEN		
	1968 significance	1976 significance	level of significance	1968 significance	1976 significance	level of significance
age	0.05	0.02	xxx	0.07	0.10	xxx
education	0.02	0.00	xxx	0.15	0.07	xxx
employment	0.04	0.02	xxx	0.11	0.14	xxx
occupation	0.03	0.01	xxx	0.07	0.09	xxx
marital status	0.00	0.00	-	0.02	0.03	xxx
rural-urban residence	0.04	0.00	xxx	0.08	0.01	xxx
smoking	0.06	0.02	xxx	0.08	0.07	xxx

xxx P < 0.1 %

xx P < 1 %

x P < 5 %

- P > 5 %

Table 28. Abstainers and drinkers in 1968 and 1976 by education, %.

	WOMEN					
	1968			1976		
	abstainers	drinkers	differ- ence	abstainers	drinkers	differ- ence
1. less than elementary school	19	7	12	24	7	17
2. elementary school	74	54	20	52	43	9
3. secondary to full high school	5	32	-27	19	31	-12
4. higher education	2	8	-6	6	19	-13
TOTAL	100	101	(-1)	101	100	(1)
N	196	257	$\Sigma=453$	286	1 149	$\Sigma=1 453$

1968: $\chi^2 = 67.607$; $df = 3$; $p < 0.1$ %; $\phi^2 = 0.14924$

1976: $\chi^2 = 104.05$; $df = 3$; $p < 0.1$ %; $\phi^2 = 0.07161$

Table 29. Abstainers and drinkers in 1968 and 1976 by rural-urban residence, %.

	WOMEN					
	1968			1976		
	abstainers	drinkers	differ- ence	abstainers	drinkers	differ- ence
1. urban	34	62	-28	49	63	-14
2. rural	66	38	+28	51	37	14
TOTAL	100	100	0	100	100	0
N	196	257	$\Sigma=453$	290	1150	$\Sigma=1440$

1968: $\chi^2 = 34.089$; $df = 1$; $p < 0.1$ %; $\phi^2 = 0.075$

1976: $\chi^2 = 20.165$; $df = 1$; $p < 0.1$ %; $\phi^2 = 0.014$

Table 30. Abstainers and drinkers by age in 1968 and 1976, %.

	WOMEN					
	1968			1976		
	abstainers	drinkers	differ- ence	abstainers	drinkers	differ- ence
15-19	6	8	-2	5	9	-4
20-29	9	28	-19	6	30	-24
30-54	49	46	3	34	44	-10
55-69	35	19	16	55	18	37
TOTAL	99	101	-	100	101	-
N	195	257	$\Sigma=452$	290	1 150	$\Sigma=1 440$

1968: $\chi^2 = 29.725$; $df = 3$; $p < 0.1$ %; $\phi^2 = 0.06994$

1976: $\chi^2 = 148.75$; $df = 3$; $p < 0.1$ %; $\phi^2 = 0.10330$

Table 31. Abstainers and drinkers in 1968 and 1976 by employment. %.

	1968		1976		difference
	abstainers	drinkers	abstainers	drinkers	
1. employed	32	54	30	65	-35
2. employed (temporarily)	0	2	1	1	0
3. retired	18	5	45	12	33
4. student	2	8	4	9	-5
5. family member	48	31	20	13	7
TOTAL	100	100	100	100	
N	196	257	290	1 150	$\Sigma=1 440$

1968: $\chi^2 = 50.476$; $df = 4$; $p < 0.1$ %; $\phi^2 = 0.11143$

1976: $\chi^2 = 195.33$; $df = 4$; $p < 0.1$ %; $\phi^2 = 0.13565$

Table 32. Abstainers and drinkers in 1968 and 1976 by occupation, %.

	WOMEN					
	1968		1976			
	abstainers	drinkers	differ- ence	abstainers	drinkers	differ- ence
farmers and farm workers	17	3	14	39	13	26
industrial workers	45	42	3	39	36	3
lower white collar	31	44	-13	17	41	-24
upper white collar	7	10	-3	5	11	-6
TOTAL	100	99	1	100	101	-1
N	75	151	$\Sigma=226$	271	1 074	$\Sigma=1 345$

1968: $\chi^2 = 15.43875$; $df = 3$; $p < 1\%$; $\phi^2 = 0.06831$

1976: $\chi^2 = 122.21057$; $df = 3$; $p < 0.1\%$; $\phi^2 = 0.09086$

Table 33. Abstainers and drinkers in 1968 and 1976 by marital status, %.

	WOMEN			
	1968		1976	
	abstainers	drinkers	abstainers	drinkers
			differ- ence	differ- ence
1. unmarried ¹⁾	22	25	-3	28
2. married	54	57	-3	58
3. separated	1	1	0	1
4. divorced	3	6	-3	5
5. widow	21	11	10	9
TOTAL	101	100	-	101
N	196	257	$\Sigma=453$	1 150
				$\Sigma=1 442$

¹⁾ In 1976 married or common law.

1968: $\chi^2 = 11.232$; $df = 4$; $p < 5\%$; $\phi^2 = 0.02479$

1976: $\chi^2 = 40.38253$; $df = 4$; $p < 0.1\%$; $\phi^2 = 0.02800$

Also the rural-urban difference has developed contrary to the general pattern. In this case it must be remembered that there are two opposite processes at work here: on the other hand abstinent women are becoming more identifiable by their social traits; on the other hand the social reality behind the external traits is changing. In this case the latter tendency is stronger: the difference between country and town has become increasingly formal and less descriptive of the way of life or cultural conditions in Finland. The other tables for women require no extensive commentary. As a sideline it may be interesting, however, to observe from table 31 that the proportion of students among abstainers has grown much more than among drinkers. This is contrary to men and reflects the fact that already in 1968 to be a student was for women an exceptionally wet and for men a relatively dry employment.

Of occupation (table 32) one must note that 1968 and 1976 are not quite comparable since the number of unknown or unclassified cases in 1968 was very large (50 % of total female sample). Most of these are assisting family members on farms and housewives and therefore the proportion of "farmers and farm workers" is smaller in the table than it would if these had been adequately reported. Nevertheless, the general result of the table is not totally an artefact. To check this the table was assembled with the unclassified cases included. Even if all of these were interpreted as "farmers or farm workers", the general result would hold: the overrepresentation of farmers among abstainers has increased (slightly) and the underrepresentation of lower white collar has become stronger.

Table 34. Abstinance rates among students 1968 and 1976

	men		women	
	students	total sample	students	total sample
1968	24	13	16	43
1976	5	9	10	20

Table 33 on marital status for women indicates no striking changes, but it may be of interest to note that about one fifth of female abstainers are widows (who also are clearly more likely to abstain than any other group).

A detailed inspection of the set of tabulations for men (Appendix 2) only confirms the main pattern of weakening association between abstinence and the background variables.

Only one technical comment is required on occupation. Unclassified or unknown cases in 1968 are not as many as among women (12 %). If they were for the most part either farmers or farm workers this would emphasise the result of the table even further: the composition of the abstinent male population resembles increasingly that of the drinking population.

Smoking and attitudes toward alcohol

As mentioned before, there are only two comparable variables that describe the drinkers and non-drinkers beyond the socio-demographic categories: smoking and attitudes toward alcohol. Even these are not especially interesting since they are very "close" to drinking itself and thus produce rather trivial results that are already known from earlier analysis of these data. For the sake of completeness and because it is part of the logic of this report it is worth mentioning them here. Table 35 presents the averages of an attitude scale that was used in 1968, 1969 and 1976. The scale consists of four five-point items, each of which is a statement about the desirability of alcohol:

1. The moderate use of alcohol is part of everyday life.
2. Alcohol never brought anyone real happiness.
3. A drink every now and then only has a stimulating effect and cannot be considered inappropriate.
4. In Finland people use far too much alcohol.

A large value of the additive scale indicates a negative attitude towards alcohol and vice versa. For my purposes the major result is that there is practically no change in the difference between abstainers and drinkers as regards their attitudes toward alcohol. Both abstainers and drinkers have tended to become more negative. The only exception is 1969 when drinking men adopted a more positive attitude towards alcohol. What one would expect to

Table 35. Averages on the scale measuring attitudes toward alcohol by sex and abstinence.

	women			men		
	1968	1969	1976	1968	1969	1976
abstainers	6.0	6.0	6.3	5.4	5.3	6.0
drinkers	4.0	3.9	4.3	3.2	2.8	3.7

Note: The figures for 1968 were computed from the data for this report. The figures for 1969 and 1976 are from Simpura 1978, table 3.

see in this table is that the difference between abstainers and drinkers should grow, since abstainers are more and more a deviant group who should also ideologically support their refusal to drink. The difference should grow especially among men, because male abstainers are less and less part of a socio-demographically defined population category, but are dispersed in all population segments almost equally in proportion to drinkers. In other words, since abstinence is - among men - not part of a way of life determined by living conditions it could again be increasingly an ideological position. This kind of reasoning gains support from the fact that the attitude difference between abstainers and drinkers is smaller among women, whose abstinence is more often related to living conditions and the way of life concomitant with these conditions.

That the expectations based on this reasoning do not seem to hold true could lead to fruitful speculations on the role of ideological commitment to abstinence. Unfortunately, this measure of alcohol attitudes is not especially suited to support such speculations, because it is very close to actually abstaining itself and does not vary much between different types of abstainers. (This was tested by calculating the average attitude scores in the 1968 data. The differences that seemed interesting at all were in fact in the expected directions: better educated male abstainers had more negative attitudes than those with low education (for drinkers the relationship was vice versa). For both male and female abstainers who were in the least dry occupational groups (lower and higher

white collar) the attitude scales averaged relatively high. Nevertheless, the results were too unsystematic to be counted on.)

In any case, the alcohol attitude scale is too close to drinking-abstaining to reflect well the interesting question on how do the ways of life of abstainers and drinkers differ in other than socio-demographic respects (besides that the abstainers do not drink).

Smoking is in this sense more interesting. It has already been shown in earlier analyses of these data that drinkers also smoke more frequently than abstainers (Mäkelä 1969; Simpura 1977). In addition to this, tables 36 and 37 show that also in this respect male abstainers have become more like the drinkers whereas the difference has become somewhat greater among females.

Individual reasons for abstinence

To end this description of the social distance between abstainers and drinkers a final set of questions should be asked: what are the individual reasons for abstinence? On the basis of the survey material this question can be divided into two parts: (1) To what extent is abstinence related to alcoholism and alcohol-related problems of the abstaining individuals? and (2) What kinds of subjective justifications do abstainers express and feel for not drinking?

The first question is very difficult to answer, especially because alcohol-related problems are hard to recognize and even more difficult to admit as a reason for stopping to drink. Furthermore, such things are very difficult to find out with the survey technique, especially as the surveys have not been designed particularly for this purpose. However, as with so many other variables, these problems should not be exaggerated. There is always an element of truth in what people say to the survey interviewer as well as to everybody else, and this is the only material we have. Besides, no exact percentages are needed - even a rough indication of the direction of change will be helpful. The proportion of (former) alcoholics or problem drinkers among abstainers can be approximated on the basis of information concerning abstainers' earlier drinking habits from the 1968 and 1976 surveys.

Table 36. Abstainers and drinkers 1968 and 1976 by smoking, %.

WOMEN

	1968		1976		difference
	abstainers	drinkers	abstainers	drinkers	
smokers ¹⁾	5	26	4	35	-31
non-smokers	95	74	96	65	31
TOTAL	100	100	100	100	-
N	196	257	273	1 125	$\Sigma=1 398$

¹⁾ In 1968 cigarettes only.

1968: $\chi^2 = 35.583$; $p < 0.1$ %; $\phi^2 = 0.07855$

1976: $\chi^2 = 100.37$; $p < 0.1$ %; $\phi^2 = 0.0718$

Table 37. Abstainers and drinkers in 1968 and 1976 by smoking, %.

	MEN					
	1968			1976		
	abstainers	drinkers	differ- ence	abstainers	drinkers	differ- ence
smokers	22	57	-35	25	51	-26
non-smokers	78	43	35	75	49	26
TOTAL	100	100	-	100	100	-
N	180	190	$\Sigma=1$ 370	118	1260	$\Sigma=1$ 378

1968: $\chi^2 = 78.520$; $p < 0.1$ %; $\phi^2 = 0.05731$

1976: $\chi^2 = 30.404$; $p < 0.1$ %; $\phi^2 = 0.02206$

Table 38 shows that the proportion of earlier drinkers among abstainers has not changed essentially from 1968 to 1976.

Table 38. Earlier drinkers among abstainers in 1968 and 1976.

	1968 ¹		1976 ²	
	%	N	%	N
women	34	196	28	289
men	49	180	52	121

Sources: 1. Mäkelä 1969, table 1 p. 47.

2. Simpura 1976, table 6, p. 93.

We also have comparable information on the reasons for stopping to drink about those abstainers who earlier used to drink at least once in two months on the average. These cases were very few as can be seen from the following table:

Table 39. The number and percentage of those abstainers who had earlier drunk at least once in a couple of months in the average in 1968 and 1976.

	1968 ¹			1976 ²		
	number	%	N	number	%	N
women	6	3	196	21	7	289
men	42	23	180	37	30	121

Sources: 1. Mäkelä 1969, table 1, p. 47.

2. Simpura 1976, table 6, p. 93.

In 1968 one of these more frequent earlier drinkers said he was an alcoholic and 13 said that they had stopped drinking at the request of a physician or because of ill health. These make 7 % of the 180 men classified as abstainers in 1968. Even if all the 42 earlier more frequent drinkers that abstained in 1968 had been alcoholics, problem drinkers, or health cases, alcoholism, drinking problems or health would be the reason for abstinence only for about one fifth of all abstaining men in 1968.

The question on the reason for stopping to drink in 1976 was not worded exactly like in 1968, but the content was the same. Drinking problems (rather than alcoholism) was mentioned as the reason for stopping to drink by 10 of the 121 abstaining men in 1976. Doctor's order or health reasons were given by 14 men. These 24 cases are 20 % of all abstaining men in 1976. If all the 37 men who drank earlier at least once in two months had been alcoholics, problem drinkers or health cases, alcoholism, drinking problems or health would be the reason for stopping to drink for about one third of abstaining men in 1976.

The number of those female respondents who in 1968 reported a high (once in 2 months) earlier drinking frequency is only 6, which makes any conclusions impossible as regards the reasons for stopping. However, the proportion of such abstainers has increased to 7 % by 1976. Of these 7 % (21 women) 2 reported drinking problems and 5 health as the reason for present abstinence.

The conclusions are not firm but they do make sense in the light of the previous sections of this chapter. As male abstainers are less and less distinguished from drinkers by their social background and living conditions, other reasons for their abstinence have become more important. One group of such reasons, independent of social background, appears to be health. On the other hand, these reasons are in most cases unimportant: most women abstainers never touched alcohol and their abstinence is much more part of the normal life of their social environment.

The second type of questions concerning individual reasons for abstinence in the Finnish drinking surveys consists of a set of items which directly describe the respondent's subjective justifications for not drinking. This set of questions was included already in K46, but it has been formulated differently in each

survey. The basic difference is that K46 and M68 used an open-ended question whereas in S76 the answers were pre-coded. Furthermore, this question was presented to both life-long and month-long abstainers in 1946 but only to year-long abstainers in the later surveys. Finally, one third of those asked failed to answer in K46.

Again, I shall let those who require mathematical precision despair over these problems and try for myself to see what I can in these data. Many of the following observations have been already made for each survey in the respective reports (Kuusi 1948; Mäkelä 1969 ; Simpura 1976). In the latter two, the subjective reasons are grouped into two categories: practical and principal reasons. In tables 40 and 41 below one's attention is drawn to the remarkably high proportion of abstainers who are simply indifferent and can give no special reason for their non-drinking. This is an especially large group of replies in K46, in proportion to the practical or principal reasons given.

It has been reported before that men tend to give more practical reasons and less moral reasons than women and that those who have earlier used alcohol give more practical reasons than life-long abstainers (Mäkelä 1969; Simpura 1977).

However, the most interesting observation to be made from these tables is that even if abstainers do give practical reasons for not drinking, they also justify it with ideological, moral or principal reasons. In fact, Simpura reports that 90 % of his respondents in S76 gave both practical and moral reasons. In this sense abstinence is experienced as a positive kind of deviance.

It even seems that the relative emphasis on moral reasons is growing, particularly among men who also are less and less indifferent towards abstinence and drinking. This again is in agreement with the main result in this chapter. As abstinence among men becomes less determined by the population category to which one belongs, it will increasingly become a property of a small deviant minority which is either committed to abstain by reasons of alcohol-related problems and health or ideologically determined to stay dry. Most people would probably prefer to emphasise the latter even if the first reason is also true.

4. DISCUSSION: TEMPERANCE AND THE GREAT MIGRATION

The starting point and Leitmotiv for this secondary analysis of survey data was the relationship between the general social change and drinking in Finland. After all these labours, what are the conclusions?

In general, it has been shown in several ways that the reduction in the abstinence rate reflects in a complex way the structural change in society. The first question to be asked before entering a discussion of this main relationship, concerns the direct contribution of new drinkers to the overall consumption level of alcohol.

Quantitative significance of new drinkers

Simpura (manuscript) has performed a decomposition of the percentage growth of the overall consumption level 1969-1976 into three elements: rise in the proportion of drinkers, change in average drinking frequency by drinkers and change in average amount drunk per sitting by drinkers. His calculations resulted in the following percentages:

	change in consumption	change in proportion of drinkers	change in drinking frequency (average)	change in amount drunk per sitting (average)
women	52 ≈	23	-10	38
men	23 ≈	0	-8	35

The right sides of the equations do not add up exactly to the left sides because the product terms between the three elements have been omitted from the decomposition.

The result is nevertheless clear in showing that not even among women has the reduction of abstinence rate contributed to overall consumption as much as the increased amount drunk per sitting. The major component in the increasing overall consumption has, then, been the tendency towards heavier drinking less frequently. The contribution of new drinkers has been of relatively minor significance. Brendan Walsh has made similar calculations for Ireland 1968-1974 (Walsh 1979). By comparing annual average growth rates in the proportion of drinkers and in the estimated consumption per drinker, he found that the latter contributed more than one half to the growth in overall consumption. In terms of Simpura's model the result for Ireland would be:

change in consumption per persons aged 15 and over	change in propor- tion of drinkers	change in estimated consumption per drinker
43 %	≈ 19 %	+ 21 %

As in Simpura's calculations, the right side does not add up to the left side.

Since Simpura's calculations are based on survey estimates and since they only cover the change 1969-1976 (the changes 1968-1976 are so great that the product terms become excessively large in this model) let us check his results by using a slightly different method of calculation.

In the following, all figures and estimates refer to population aged 15 and over.

Table 40. Estimates of components of growth in alcohol consumption in Finland 1968-1976.

	consumption per person aged 15 and over litres/year	abstainers		consumption per drinker litres/year
		1 000 persons	per total population %	
1968	3.78	889	24.9	5.04
1976	8.03	497	13.4	9.27
change	4.25	392	11.5	4.23

If the abstinence rate had remained at the 1968 level, the number of abstainers in 1976 had been about 925 thousand persons which is 428 thousand more than the actual number shown in table 40. We may take this difference as the relative net increase in the drinking population that is due to the reduction in the abstinence rate. The share of these "new drinkers" of the total consumption level in 1976 is 0.58 litres assuming that their consumption equals the average per drinker in 1968 (5.04 l). This is 14 % of the increase in the average consumption per persons aged 15 and over from 1968 to 1976.

On the other hand, assuming that the "new drinkers" reach the average individual consumption level per drinker in 1976 (9.27 l), their contribution to the overall consumption level per persons aged 15 and over is 1.07 litres, which is 25 % of the increase from 1968 to 1976. Thus we may conclude that the immediate contribution of new drinkers to the increase in the level of

alcohol consumption in the population is in the order of 14 to 25 per cent. No more.

This is an important remainder of the fact that the rise in the level of alcohol consumption is not to be explained by the direct effects of fading temperance. The other aspects mentioned in the beginning of this report: new ways of drinking and new circumstances of drinking occasions are important in themselves.

Yet abstinence and its disappearance from society is as such an interesting reflection of a cultural trait, especially as it seems to qualify the trivial explanations of increasing alcohol use by the general structural change in society.

The Wet Generation

The first of these qualifications is the generation-specificity of the fall in abstinence rates.

That we do have a Wet Generation, consisting of those born between just before and a few years after the war is further supported by the fact that this age group not only drinks most but also has increased its drinking more than the earlier generations. Furthermore, the share of heavy drinking (at least 1 per mille BAC) is highest among the 20-29 old in 1976 (Simpura 1978, tables 20 and 21).

Österberg (manuscript, figure 16) has shown with age-specific data on arrests for drunkenness that whereas each successive cohort born before 1935 tended to be less vulnerable to arrests when they reached the age 21-29 than the preceding cohorts, the cohort born 1935-1940 got arrested more and more frequently as they grew older.

The particular wetness of the around-the-war cohorts is further emphasised by the fact that the age at first drink has again started to rise after 1973. For example, in 1973 only 27 % of boys aged 14 (born in 1959) were year-long abstainers, but when the boys born in 1965 became 14 in 1979, as much as 51 % of them were still abstainers (Ahlström 1979).

The implications of the existence of a particular Wet Generation are far-flung and raise a number of questions.

First of all, it probably contributes to the present stagnation in the growth in overall consumption of alcohol since this

cohort is presently reaching the stage in their life-cycle at which alcohol consumption usually is reduced or at least stabilised.

Secondly, if the Wet Generation is largely responsible for the consumption growth in Finland, then the 1969 legislation is put into a new light. Its role does not seem to be an autonomous cause of the consumption boom but rather an expression of the moral views and desires of a generation that reached maturity in the 1960's. To exaggerate a little, the function of the 1969 legislation seems mainly to have been a symbol which legalised alcohol and made it officially acceptable also to the members of the earlier generations: women and especially rural women who still had cherished the ideals of temperance and teetotalism in their lives as something proper and respectable.

Thirdly, the Wet Generation raises the question whether in other countries as well the generational differences may have played a part in the consumption increase. The timing of the beginning of this increase at the early 1960's in many countries is a hint in this direction. It is not possible here to make a systematic review of available materials on this subject. However, it is very interesting to note that in the U.S.A no such generation gap as regards abstinence has been found as of 1960 (Glenn & Zody 1970). Also in Norway the indications are that the gap is not as wide as in Finland, although the data is not arranged very well to show this (Nordlund 1977).

Abstinence and the way of life

Finally, the Wet Generation raises questions related to the present scientific interest in the 'way of life' concept. The most interesting aspect brought to light or clarified by this conceptualisation is the effort to identify certain typical ways of life that are distinguished not only by external conditions but also by action within and subjective reactions towards those conditions (Roos & Roos 1978; Roos 1977). Furthermore, the ambition of students in this area is to identify an internal logic that ties the various aspects of particular ways of life together, whether this logic is a 'functional and intellectual strategy or process

through which people succeed in overcoming the everyday challenges set by objective social and economic conditions" (Järvelä-Hartikainen & Taponen 1979, 5), "capitalist subjectivity" (Eskola & Kortteinen & Roos 1979, 29), "alienation" or something else.

If it can be assumed that total abstinence reflects certain subjective or moral elements in peoples' lives (perhaps even better than - reasonable - differences in the quantity of drinking), the uniformity of the young generation in this respect raises questions. Abstinence among this generation is not characteristic to the most solid facts of life, at least not to those that traditionally have distinguished the relatively abstinent sub-populations: sex, residence and occupation. In this view it seems that at least some of the thinner layers of the way of life do not mechanically reflect living conditions.

Two possibilities to explain this are thinkable. The first is that there are some more subtle factors imposed by the Great Migration such as the quality of work and leisure or interaction patterns, especially with relatives and neighbours, that affect the generations differently. This possibility is very interesting in view of the fact that it is particularly the younger people who have been transplanted from their origins. This could have affected the interaction patterns of young people towards more impersonal relations with other people, which has often been observed in studies on social relationships and loyalties of young people (Allardt & Haranne 1974, 52-55; Jaakkola & Makarczyk 1978). This "new ad-hocracy" (Toffler 1970) could mean that contacts between people require "artificial material" such as alcohol, or special institutional arrangements (dancing, restaurants) that also often involve drinking.

The second possibility is that abstinence is a subjective-cultural trait to such an extent that adherence to it depends mainly on the vulnerability to new cultural influences offered by mass-communications, popular culture etc.

The latter possibility is supported by the findings in this report. Abstinence has been deserted first by the young who are most exposed to such cultural influences. Later the **drinking custom** has **reached** also the strongest pockets of **temperance**: rural adult women, somewhat independently of changes in their employment.

Cultural resistance to drinking does seem to exist and delay the diffusion of the drinking habit to the older abstinent segments of the population. However, this resistance is not very strong, as it is in the U.S.A., where the traditionally abstaining regions have remained so (Room 1979). Among the Finnish female population such resistance can only be upheld if supported by external conditions: low education, old age, lack of employment outside the home (and money for individual use). These "supporting factors" have made the abstaining female population increasingly identifiable from the rest of the population. The group of male abstainers on the other hand is so small that the broad categorisations used in this report do not distinguish them as a particular sub-population. Male abstinence is nowadays increasingly related to drinking problems in the past but perhaps also to strong individual convictions rather than to living conditions and the general way of life typical of those conditions.

Thus, the observations made in this report open up two paths for a more detailed interpretation of the relationship between increased drinking and the general social changes in society. The first is that the increase in drinking is not a continuous process but may be a relatively limited phenomenon related to the cultural conceptions and social circumstances of one generation. The second concerns the origins of these conceptions that cannot be adequately identified on the basis of "the most solid facts of life" that have been analysed in this report.

To follow these paths not only abstinence but also variations in drinking must be studied. It is well to note, however, that survey data alone will not provide an adequate material for such an interpretation: insights from observational studies are priceless for this purpose.

REFERENCES

- Ahlström, Salme: Nuorten juomatapojen kehityspiirteitä. Kehitys 1960-luvun alusta 1970-luvun loppuun. Alkoholipolitiikka 44:111-122, 1979.
- Ahlström-Laakso, Salme & Österberg, Esa: Alkoholien kulutus Suomessa 1960-1976. Haittaprojektin osaraportti. Alkoholipoliittisen tutkimuslaitoksen tutkimusseloste No. 117. Helsinki 1978.
- Alestalo, Matti & Toivonen, Timo: Changes in class structure and stratification in Finnish society 1950-1974. Research reports of the Department of Sociology, University of Helsinki, No. 210. Helsinki 1977.
- Alkoholinkäyttö, kaupungistuminen ja rakennemuutos OECD-maissa toisen maailmansodan jälkeen. Helsingin yliopiston sosiologian laitoksen monisteita No. 20. Helsinki 1978.
- Allardt, Erik & Haranne, Markku: Attitudes toward modernity and modernization: An appraisal of an empirical study. Research Group for Comparative Sociology, Report No. 6, University of Helsinki 1974.
- Armyr, Gunno: Number of total abstainers and their socio-economic and life style characteristics in some countries. Paper presented at the 24th International Institute on the Prevention and Treatment of Alcoholism, Zürich, June 1978.
- Asunto- ja elinkeinotutkimuksen ammattiluokitus. Tilastokeskus. Helsinki 1975.
- Eskola, K. & Kortteinen, M. & Roos, J.P.: The way of life and cultural activities in the Finnish family. Research project on "The way of life in social change". University of Joensuu-Academy of Finland 1978.
- Glenn, Norval D. & Zody, Richard E.: Cohort analysis with national survey data. The Gerontologist 10:233-240, 1970.
- Gronow, Jukka & Klemola, Pertti & Partanen, Juha: TANDEM. Demokratian rajat ja rakenteet. Tutkimus suomalaisesta hallitsemistavasta ja sen taloudellisesta perustasta. WSOY, Juva 1977.
- Jaakkola, Magdalena & Makarczyk, Waclaw: Social networks. In: Allardt, E. & Wesolowski, W. (eds.): Social structure and change - Finland, Poland - Comparative perspective. Warszawa 1978.
- Jallinoja, Riitta: Miehet ja naiset. In: Valkonen, Tapani & Alapuro, Risto & Alestalo, Matti & Jallinoja, Riitta & Sandlund, Tom: Suomalaiset. WSOY. In press.

- Julkunen, Raija & Kunttu, Timo: Vapaa-ajan kulutus. Sosiaalipoliitikka 1978. Sosiaalipoliittinen yhdistys.
- Järvelä-Hartikainen, Marja & Taponen, Matti: The frame of ways of life in Finland. An overview. Part I. Research reports of the research project on "The way of life in social change". University of Joensuu-Academy of Finland. Joensuu 1979.
- Komiteamietintö 1978:33. Alkoholikomitean mietintö. Helsinki 1978.
- Kuusi, Pekka: Alcohol sales experiment in rural Finland. The Finnish Foundation for Alcohol Studies. Helsinki 1956.
- Kuusi, Pekka: Suomen viinapulma gallup-tutkimuksen valossa. Otava. Helsinki 1948.
- Living conditions 1950-1975. Statistical information on the quality of life in Finland and factors influencing it. Statistical surveys No. 58. Central Statistical Office of Finland. Helsinki 1977.
- Mäkelä, Klaus: Ikä ja alkoholinkäyttö. Alkoholipoliitikka 35:314-322, 1970.
- Mäkelä, Klaus: Raittiit. Alkoholikysymys XXXVII:45-53, 1969.
- Mäkelä, Klaus: Uusi alkoholilainsäädäntö ja raittiiden lukumäärä. Alkoholikysymys XXXVIII:18-23, 1970.
- Mäkelä, Klaus: Measuring the consumption of alcohol in the 1968-1969 alcohol consumption study. Social Research Institute of Alcohol Studies. Helsinki 1971.
- Mäkelä, Klaus & Österberg, Esa: Alkoholien kulutus ja alkoholipoliitikka Suomessa ja Ruotsissa vuosina 1951-1973 II. Alkoholipoliitikka 40:99-108, 1975.
- Nordlund, Sturla: Data om alkoholspørsmål. Tabellarisk oversikt over resultater fra intervjuundersøkelser 1956-1973. Statens institutt for alkoholforskning. Oslo 1977.
- Österberg, Esa: Indicators of damage and the development of alcohol conditions in Finland during the years 1950-1975. Manuscript for ISACE. Social Research Institute of Alcohol Studies, Helsinki 1979.
- Partanen, Juha: On national consumption patterns and the use of alcohol. Manuscript. Social Research Institute of Alcohol Studies, Helsinki.
- The report of the Alcohol Committee (Finland). Summary of committee report 1978:33. Prepared by Oy Alko Ab information service.

- Reynolds, H.T.: The analysis of cross-classifications. The Free Press. New York 1977.
- Room, Robin: Trends in neighborhood drinking characteristics in the U.S. 1964-1970. The Drinking and Drug Practices Surveyor, No. 14, March 1979.
- Roos, Barbara & Roos, J.P.: "Ways of life in Finland: A preliminary discussion". Research project on "The way of life in social change". University of Joensuu-Academy of Finland. 1978.
- Sariola, Sakari: Drinking patterns in Finnish Lappland. The Finnish Foundation for Alcohol Studies. Helsinki 1956.
- Seppänen, Paavo: Dimensions and phases of change in Finnish society. International Journal of Politics 4:222-253.
- Simpura, Jussi: Juomatapatutkimus -76:n tutkimusaineisto. Alkoholipoliittisen tutkimuslaitoksen tutkimusseloste No. 107. Helsinki 1977.
- Simpura, Jussi: The rise in aggregate alcohol consumption and changes in drinking habits. Manuscript. The Social Research Institute of Alcohol Studies, Helsinki.
- Simpura, Jussi: Raittius uuden alkoholilain aikana. Alkoholikysymys XLV:87-108, 1977.
- Simpura, Jussi: Suomalaisten juomatavat vuosina 1969 ja 1976. Kulutetut alkoholimäärät ja alkoholin ongelmakäyttö. Alkoholipoliittisen tutkimuslaitoksen tutkimusseloste No. 114. Helsinki 1978.
- Sulkunen, Pekka: Behind the curves: On the dynamics of rising consumption level. In: The Ledermann curve. A report on a symposium. Alcohol Education Centre. London 1977.
- Sulkunen, Pekka: Developments in the availability of alcoholic beverages in the EEC countries. Reports from the Social Research Institute of Alcohol Studies No. 121. Helsinki 1978.
- Suomen tilastollinen vuosikirja 1948, 1968, 1969 and 1970. Helsinki.
- Toffler, Alvin: Future shock. Pan Books. London 1970.
- Walsh, Brendan: Alcohol consumption, alcohol abuse, and the scope for control policies in the Irish context. Paper presented at the Second Working Meeting of the International Study of Alcohol Control Experiences, Pacific Grove, Calif., April 1979.
- Waris, Heikki: Muuttuva suomalainen yhteiskunta. WSOY, Porvoo 1973.

Appendix 1. Population in Finland by age groups. 1)

	0-19	20-29	30-39	40-49	50-59	60-64	65-69	70-	total in 1 000 persons								
1946	1 394	276	607	542	592	169	492	886	350	840	136	630	105	265	153	444	3 833
%	36.4	15.9	15.4	12.9	9.1	3.6	2.7	4.0	100.0								
1968	1 624	566	748	856	575	079	559	261	501	305	222	666	168	317	233	242	4 633
%	35.1	16.2	12.4	12.1	10.8	4.8	3.6	5.0	100.0								
1969	1 580	575	756	326	574	041	573	356	486	234	228	245	173	398	242	102	4 614
%	34.3	16.4	12.4	12.4	10.5	5.0	3.8	5.2	100.0								
1976	1 405	203	854	948	659	394	558	031	506	295	222	691	209	487	314	787	4 731
%	29.7	18.1	13.9	11.8	10.7	4.7	4.4	6.7	100.0								

1) Estimates based on census data for 1950, 1960 and 1970.

Appendix 2. Abstainers and drinkers in 1968 and 1976 by education, rural-urban residence, age, employment, occupation, and marital status, %. MEN

EDUCATION	1968			1976		
	abstainers	drinkers	differ- ence	abstainers	drinkers	differ- ence
1. less than elementary school	20	10	10	17	9	8
2. elementary school	68	62	6	56	48	8
3. secondary to full high school	10	21	-11	16	25	-9
4. higher education	2	8	-6	12	18	-6
TOTAL	100	101	-1	101	100	1
N	180	1 189	$\Sigma=1$ 369	120	1 271	$\Sigma=1$ 391

1968: $\chi^2 = 33.761$; $df = 3$; $p < 0.1$ %; $\phi^2 = 0.02466$

1976: $\chi^2 = 14.240$; $df = 3$; $p < 1$ %; $\phi^2 = 0.00072$

RESIDENCE	1968			1976		
	abstainers	drinkers	differ- ence	abstainers	drinkers	differ- ence
1. urban	25	53	-28	52	56	-4
2. rural	75	47	28	48	44	4
TOTAL	100	100	-	100	100	-
N	180	190	$\Sigma=1$ 370	120	1271	$\Sigma=1$ 391

1968: $\chi^2 = 50.308$; $df = 1$; $p < 0.1$ %; $\phi^2 = 0.03672$

1976: $\chi^2 = 0.65400$; $df = 1$; $p > 5$ %; $\phi^2 = 0.00047$

AGE	1968			1976		
	abstainers	drinkers	differ- ence	abstainers	drinkers	differ- ence
15-19	22	7	16	9	8	1
20-29	6	23	-17	11	26	-15
30-54	36	49	-13	41	46	-5
55-69	35	21	+14	39	19	20
TOTAL	100	100	-	100	98	-
N	180	190	$\Sigma=1$ 370	120	1271	$\Sigma=1$ 391

1968: $\chi^2 = 66.013$; $df = 3$; $p < 0.1\%$; $\phi^2 = 0.04818$

1976: $\chi^2 = 22.917$; $df = 3$; $p < 0.1\%$; $\phi^2 = 0.01648$

EMPLOYMENT	1968			1976		
	abstainers	drinkers	differ- ence	abstainers	drinkers	differ- ence
1. employed	67	84	-17	57	73	-16
2. unemployed (temporarily)	1	1	0	1	3	-2
3. retired	13	7	6	34	16	18
4. student	12	6	6	4	7	-3
5. family member	8	1	7	4	2	2
TOTAL	101	99	(-2)	100	101	(1)
N	180	1 190	$\Sigma=1 370$	122	1 271	$\Sigma=1 393$

1968: $\chi^2 = 50.657$; $df = 4$; $p < 0.1\%$; $\phi^2 = 0.03698$

1976: $\chi^2 = 30.200$; $df = 4$; $p < 0.1\%$; $\phi^2 = 0.02168$

OCCUPATION	1968			1976		
	abstainers	drinkers	differ- ence	abstainers	drinkers	differ- ence
1. farmers and farm workers	47	23	24	28	19	9
2. industrial workers	39	49	-10	50	47	3
3. lower white collar	9	14	-5	9	18	-9
4. upper white collar	5	14	-9	13	16	-3
TOTAL	100	100	-	100	100	-
N	137	1 064	$\Sigma=1 201$	117	1 227	$\Sigma=1 344$

1968: $\chi^2 = 41.27449$; $df = 3$; $p < 0.1\%$; $\phi^2 = 0.03437$

1976: $\chi^2 = 10.16772$; $df = 3$; $p < 5\%$; $\phi^2 = 0.00757$

MARITAL STATUS	1968			1976		
	abstainers	drinkers	differ- ence	abstainers	drinkers	differ- ence
1. unmarried	34	26	8	29	28	1
2. married ¹⁾	63	70	-7	68	66	2
3. separated	1	1	0	0	0	0
4. divorced	1	2	-1	1	4	-3
5. widow	1	1	0	2	2	0
TOTAL	100	100	-	100	101	-
N	180	190	$\Sigma=1$ 370	122	1270	$\Sigma=1$ 392

1) In 1976 married or common law.

1968: $\chi^2 = 6.2269$; $df = 4$; $p > 5\%$; $\phi^2 = 0.004545$

1976: $\chi^2 = 3.27156$; $df = 4$; $p > 5\%$; $\phi^2 = 0.00235$

ALKOHOLIPOLIITTISEN TUTKIMUSLAITOKSEN TUTKIMUSSELOSTEET

REPORTS FROM THE SOCIAL RESEARCH INSTITUTE OF ALCOHOL STUDIES, HELSINKI, FINLAND

1	Touko Markkanen: Faktoriluvun määrittäminen Ahmavaara-Markkanen faktorimallin pohjalta (Factor number specification according to the Ahmavaara-Markkanen factor model). 1960, 38p.	19	Eero Tuominen: Kokemuksia krapulanhoitoasemien toiminnasta (Experiences in the operation of sobering up stations). 1966, 68 p.
2	Esko Kalimo: Haastattelijain vaikutus haastattelutuloksiin (The influence of interviewers on interview results). 1962, 107 p.	20	Kalevi Kivistö & Klaus Mäkelä: Kolmen asenneasteikon faktorianalyysi (The factor structure of three attitude areas). 1966, 20 p.
3	Eero Tuominen: Alkoholin käyttö ravintoloissa (The use of alcohol in restaurants). 1963, 30 p.	21	Antti Tapaninen: Eräät sosiaaliset harrastus-, lahjakkuus- ja luonnemuuttajat väkijuomien käytön selittäjinä (Explanation of alcohol use in terms of social activity, talent and character variables). 1966, 79 p.
4	Touko Markkanen: Transformaatioanalyysistä (On transformation analysis). 1963, 6 p.	22	Klaus Mäkelä: Tuomioita ja tuomareita (Sentences and judges). 1966, 16 p.
4 a	Touko Markkanen: On transformation analysis. 1964, 7 p. (English translation of no 4).	23	Klaus Mäkelä: Kokemusperäisiä lisiä kysymykseen yleisen oikeustajunnan ja oikeuskäytännön vastaavuudesta (Correspondence of public sense of justice and judicial practice). 1966, 14 p.
5	Touko Markkanen: Primäärifaktorikannan ja dimension valintaratkaisusta (On the choice of primary factor base and its dimensionality). 1963, 13 p.	24	Seppo Mustonen: Symmetrinen transformaatioanalyysi (Symmetric transformation analysis). 1966, 41 p.
5 a	Touko Markkanen: On the choice of primary factor base and its dimensionality. 1964, 11 p. (English translation of no 5).	25	Tor Hartman: Om begreppet sjukdom och definition av alkoholism (On the concept of illness and the definition of alcoholism). 1966, 22 p.
6	Touko Markkanen: Yhteiskuntaluokan teoriasta (On the theory of social class). 1963, 29 p.	26	K.A. Achte, L. Ginman & K. Seppälä: Alkoholipsykoosit Helsingissä vuosina 1930, 1950 ja 1960 (Alcohol psychoses in Helsinki in 1930, 1950 and 1960). 1967, 165 p.
7	Juha Partanen: Perinnöllisyyden sekä ympäristön vaikutuksen voimakkuuden määrittämisestä ja määrittämisestä (The specification and determination of the strength of hereditary and environmental effects). 1963, 20 p.	27	Anders Ekholm: A generalisation of the two-state Semi-Markov model. 1967, 37 p.
8	Juha Partanen: Ryhmittelyongelmista (Grouping problems). 1963, 14 p.	28	Sirkka-Liisa Säilä: Huoltola, päihdyttävien aineiden väärinkäyttäjien huoltolaitys (The institution for alcoholics, treatment institution for abusers of intoxicants). 1967, 88 p.
9	Juha Partanen: Väkijuomien käyttäjätyyppit (Types of alcohol users). 1963, 17 p.	29	Klaus Mäkelä & Eero Tuominen: Puolimatkantalo alkoholistien hoitomuotona: Pajakiven hoitokoti (Halfway-house as a treatment institution for alcoholics: the treatment home in Oulu). 1967, 77 p.
10	Juha Partanen: Kaksosparien dominanssisuhteet (The dominance relationship of twins). 1963, 10 p.	30	Antero Aarvala: Rattijuoppous Helsingissä. Rattijuoppoudesta Helsingissä vuosina 1958, 1960 ja 1961 syytetyt miehet (Drunken driving in Helsinki. Drunken driving charges in Helsinki in 1958, 1960 and 1961). 1968, 211 p.
11	Touko Markkanen: Väkijuomien käyttöä kuvaavien muuttujien yhdistely. Pääkomponenttianalyysin ja faktorianalyysin vertailua (Combining variables describing the use of alcohol. Principal component analysis and factor analysis comparison). 1964, 29 p.	31	Pekka Kiviranta: Tutkimus AA-liikkeen, A-klinikoiden ja alkoholistihuoltoloiden klienteistä (A study of clients in AA groups, A clinics and in asylums for alcoholics). 1968, 125 p.
12	Touko Markkanen: Sosiaaliset ja psykologiset faktorit väkijuomien käytön selittäjinä. Tutkimus faktoritulosten sisällöllisestä ryhmittämisestä ja vertailusta (Social and psychological factors to describe the use of alcohol. A study comparing and categorizing the content of factor analysis output). 1964, 92 p.	31 a	Anders Ekholm: A Pseudo-Markov model for stationary series of events. 1968, 59 p.
13	Jaakko Turka: Drinking and social control in Finland. 1964, 27 p.	32	Toivo Pöysä & Klaus Mäkelä: Pontikan vuosituontanto (The annual production of moonshine). 1968, 7 p.
14	Seppo Mustonen: Tilastollisista monimuuttujamenetelmistä (Multivariate statistical methods). 1965, 6 p.	33	Klaus Mäkelä: Tilastoimaton alkoholinkulutus ja laitton liike (Unrecorded consumption of and illicit traffic in alcohol). 1969, 16 p.
15	Juha Partanen: Tilastollisista aineistonkäsittelymenetelmistä (Statistical data analysis methods). 1965, 8 p.	34	Aarni Nyberg: Alkoholijuomien hintojen ja myynnin vo-lyymien kehitys indeksisarjojen kuvaamana (The trend of alcohol prices and sales volume illustrated by indices). 1969, 66 p.
16	Helga Jämsä: Käyttäytyminen juomaryhmässä. Kokeellinen tutkimus roolien, eräiden persoonallisuuspiirteiden ja humalakäytöksen välisistä yhteyksistä pienryhmissä (Drinking group behaviour. Experimental research on interlinkages of roles, some personality traits and behaviour under intoxication in small groups). 1965, 124 p.	35	Achilles Westling: Alkoholistien kuntoutusongelma Suomessa (The problem of rehabilitating alcoholics in Finland). 1969, 213 p.
17	Touko Markkanen: Sosiaalista osallistumista kuvaavien muuttujien yhdistelystä (Combining variables describing social participation). 1965, 16 p.	36	Klaus Mäkelä: Alkoholinkulutuksen mittaaminen (Measuring the consumption of alcohol). 1969, 36 p.
18	Klaus Mäkelä: Rikoksia ja rangaistuksia (Crimes and punishments). 1965, 20 p.		

- 37 ★ **Salme Ahlström-Laakso:** Juopumuspidätys - sosiaalisen kontrollin keino: Helsingin ja Kööpenhaminan vertailu (An arrest for drunkenness - a means of social control. Comparison of Helsinki and Copenhagen). 1969, 157 p.
- 38 **Klaus Mäkelä:** Yhdistettyjen mittareiden rakentaminen (The construction of summary indices in the consumption study). 1969, 6 p.
- 39 **Klaus Mäkelä:** Alkoholinkäytön motiivien faktorirakenne (The factor structure of motives for drinking). 1969, 15 p.
- 40 **Klaus Mäkelä:** Alkoholinkäytön kasautuneisuus (Concentration of alcohol consumption). 1969.
- 41 **Juha Partanen:** Ravintolatutkimus 1968. Ravintoloiden toimintaa ja asiakkaita koskevan tiedustelun tulokset (Restaurant study 1968. Results of survey concerning restaurant operations and customers). 1969, 65 p.
- 42 **Klaus Mäkelä:** Alkoholien vuosikulutus eri väestöryhmissä (Annual consumption of alcohol in different demographic groups). 1969, 10 p.
- 43 **Eero Tuominen:** Puolimatkantalo alkoholistien hoitomuotona: Toukolan hoitokoti (The halfway house as a form of treating alcoholics. The Toukola halfway house). 1969, 50 p.
- 44 **Klaus Mäkelä:** Ongelmakäyttäjät (Problem drinkers). 1969, 17 p.
- 45 **Salme Ahlström-Laakso:** Alkoholistilaskenta kahdessa maalaiskunnassa (Census of alcoholics in two rural communes). 1969, 52 p.
- 46 **Klaus Mäkelä:** Alkoholinkäytön viikkorytmi (Weekly rhythm of drinking). 1969, 9 p.
- 47 **Anders Ekholm:** Korrelaatioiden palauttaminen dikotomisiin taustamuuttujiin (Converting correlations back into dichotomous background variables). 1969, 21 p.
- 48 ★ **Seppo Mustonen:** Symmetric transformation analysis. 1969, 44 p.
- 49 **Klaus Mäkelä:** Alkoholinkulutuksen jakautuma (The distribution of alcohol consumption). 1969, 15 p.
- 50 **Eero Tuominen:** Puolimatkantalo alkoholistien hoitomuotona. Koivulan hoitokoti ja kolmen hoitokodin potilasaineet (The halfway house as a form of treating alcoholics. The Koivula halfway house and material on patients at three halfway houses). 1970, 21 p.
- 51 **Klaus Mäkelä:** Sosiaalinen myyntityöntarkastus (The working of individual alcohol sales control in Finland). 1970, 24 p.
- 52 ★ **Klaus Mäkelä:** 1. ja 2. haastattelukerran kulutuslukujen vertailukelpoisuus (Comparability of consumption figures from the first and second rounds of interviews). 1970, 16 p.
- 53 **Juha Partanen:** Asiakastutkimus 1968. Ravintolakäyntien tiheyttä ja suhtautumista ravintoloihin kartoittavan tutkimuksen tulokset (Clientele study 1968. Findings of a study on the frequency of restaurant visits and the attitudes toward restaurants). 1970, 79 p.
- 54 ★ **Aarni Nyberg:** Myynnin vaihtelu Suomen anniskeluravintoloissa. Empiirinen kysyntätutkimus (Sales fluctuations in licensed restaurants in Finland. Empirical research on demand). 1970, 62 p.
- 55 **Klaus Mäkelä:** Juomiskertojen useus nautittujen juomien ja määrien mukaan ennen ja jälkeen lain uudistuksen (The frequency of drinking occasions according to consumed beverages and quantities before and after the new liquor laws). 1970, 13 p.
- 56 **Klaus Mäkelä:** Ikä ja alkoholinkäyttö (Age and alcohol consumption) 1970, 13 p.
- 57 **Salme Ahlström-Laakso:** Alkoholistien alkoholinkäyttötavoista (Drinking habits of alcoholics). 1970, 89 p.
- 58 **Seppo Forsberg & Jeddi Hasan:** Huoltolaan toimitettujen miesalkoholistien fyysisen kuntoutumisen piirteitä neljän ensimmäisen viikon aikana (The physical rehabilitation of male alcoholics during their first four weeks in treatment institutions). 1970, 62 p.
- 59 **Salme Ahlström-Laakso:** Aineiston keruu (Data collection. A partial report of research done on alcoholics). 1972, 20 p.
- 60 **Eero Lahelma:** Kuolemaan johtaneiden työtaturmien tilastointi ja tutkiminen (Analysis and statistics on fatal accidents at work. Interim report on the study of occupational accidents by the Finnish Foundation for Alcohol Studies). 1972, 31 p.
- 61 ★ **Lasse Murto:** Alkon myymälälakko ja Tampereen asunnottomat alkoholistit (The strike by Alko's sales personnel and the homeless alcoholics in Tampere). 1973, 26 p.
- 62 ★ **Klaus Mäkelä:** Väestön käsitykset Alkon lakosta vuonna 1972 (Popular impressions of the Alko strike of 1972). 1973, 20 p.
- 63 **Klaus Mäkelä:** Väestön alkoholinkäyttö vuosina 1968, 1969 ja 1972 (The use of alcohol in Finland in 1968, 1969 and 1972). 1973, 10 p.
- 64 **Klaus Mäkelä:** Taulukoita eri väestöryhmien alkoholinkäytöstä vuonna 1972 (Tables on the use of alcohol in different demographic groups in 1972). 1973, 12 p.
- 65 ★ **Klaus Mäkelä:** Pontikan ja kiljun käyttö Suomessa vuonna 1972 Gallup-tutkimuksen mukaan (The use of moonshine and strong home-brew ("kilju") in Finland in 1972 according to a Gallup poll). 1973, 7 p.
- 66 ★ **Timo Karmakallio & Leena Pyrrö:** Turistinen alkoholinkulutus (Alcohol consumption by tourists). 1973, 42 p.
- 67 ★ **Sirkka-Liisa Säilä:** Lakkosäilöönnotot (Drinkers taken into custody during the Alko strike). 1973, 27 p.
- 68 **Matti Ollikainen:** A-klinikasäätiön yhteiskunnallistamiskysymys ja PAV-huollon tavoitteet (The issue of socializing the A Clinic Foundation and the goals of the welfare for misusers of intoxicants). 1973, 26 p.
- 69 **Salme Ahlström-Laakso:** European drinking habits: A review of research and some suggestions for conceptual integration of findings). 1973, 14 p.
- 70 ★ **Klaus Mäkelä & Toivo Pöysä:** Alkon lakko, kotitekoisen alkoholi ja laiton liike (The Alko strike, homemade alcohol and illicit liquor traffic). 1973, 15 p.
- 71 ★ **Eero Lahelma:** Työturvallisuus ja alkoholi. Tutkimus kuolemaan johtaneista työtaturmista Suomessa vuosina 1965-1969 (Safety at work and alcohol. A study of fatal accidents occurring at work in Finland in the years 1965-1969). 1974, 135 p.
- 72 ★ **Pekka Sulkunen:** On international alcohol statistics. A working paper on WAP Data. 1973, 78 p.
- 73 ★ **Kerttu Suuronen:** Perinteellinen juhla juominen kansantieteelliseen kyselyyn A-18/73 saatujen vastausten mukaan (Traditional festive drinking in Finland based on responses to questionnaire A-18/73 for ethnological data). 1973, 65 p.
- 74 ★ **Lasse Murto:** Suomalaiset päihdeongelmalliset Kööpenhaminassa (Finnish problem drinkers and drug users in Copenhagen). 1974, 49 p.
- 75 ★ **Klaus Mäkelä:** Alkon lakko ja alkoholiin kytkeytyvät hoito- ja huoltopalvelukset (The Alko strike and treatment and welfare services connected with alcohol). 1974, 11 p.
- 76 ★ **Kerttu Suuronen:** Traditional festive drinking in Finland according to responses to an ethnological questionnaire A-18/73. 1974, 48 p. (English translation of no 73).

- 77 ★ Klaus Mäkelä: Types of alcohol restrictions, types of drinkers and types of alcohol damages: The case of the personnel strike in the stores of the Finnish alcohol monopoly. 1974, 21 p.
- 78 ★ Martti Nygren & Raimo Sailas: Kotitaloustiedustelujen käyttökelpoisuudesta alkoholinkulutuksen mittaamiseen (On the applicability of household surveys in measuring alcohol consumption). 1974, 18 p.
- 79 ★ Esa Österberg: Alkon panimopoliittikka vuosina 1948-1972 (The brewery policy of the State Alcohol Monopoly in the years 1948-1972). 1974, 130 p.
- 80 Eero Lahelma: Päihdeongelmaisten työntekijöiden hoitoonohjaus keväällä 1974 (Referring alcohol and drug problem employees to treatment in spring 1974). 1974, 30 p.
- 81 Salme Ahlström-Laakso: Changing drinking habits among Finnish youth. 1975, 29 p.
- 82 ★ Klaus Mäkelä: Criminalization and punishment in the prevention of alcohol problems. 1975, 33 p.
- 83 ★ Esa Österberg: The pricing of alcoholic beverages as an instrument of control policy. 1975, 20 p.
- 84 ★ Klaus Mäkelä: Taulukoita eri väestöryhmien alkoholinkäytöstä vuosina 1972, 1973 ja 1974 (Tables on the use of alcohol in different demographic groups in 1972, 1973 and 1974). 1975, 15 p.
- 85 Martti Lumio & Pekka Sulkunen: International alcohol statistics: interests, types, and utilization. 1975, 20 p.
- 86 ★ Kari Poikolainen: Fatal alcohol poisonings in cultural context. 1975, 12 p.
- 87 Eero Lahelma: Social aspects of industrial alcoholism programs. 1975, 11 p.
- 88 ★ Sirkka-Liisa Säilä: The accumulation of police arrests for drunkenness in 1923, 1939 and 1970 in Finland. 1975, 9 p.
- 89 ★ Hannu Mäkinen: Alkoholii liikakäyttäjien kuntoutus. Evaluatiivinen tutkimus Keski-Suomen kuntoutuskeskuksessa (The rehabilitation of heavy drinkers. An evaluative study of the Rehabilitation Center of Central Finland). 1975, 245 p.
- 90 ★ Oiva Turpeinen: Viinaan kuolleet Suomessa vuosina 1802-1877 (Alcohol fatalities in Finland in 1802-1877). 1975, 50 p.
- 91 ★ Klaus Mäkelä: Notes on the relationships between alcohol problems. 1975, 18 p.
- 92 ★ Esa Österberg: Alkoholipoliittinen päätöksenteko ja kustannushyötyanalyysi: kustannushyötyanalyysi poliittisen päätöksenteon apuvälineenä (Decision-making in alcohol policy and cost benefit analysis: Cost-benefit analysis as an instrumentality in reaching decisions bearing on policy). 1976, 57 p.
- 93 Eero Lahelma: Työpaikkojen hoitoonohjatut alkoholi-ongelmaiset (Problem drinkers referred to treatment from six industrial plants). 1976, 11 p.
- 94 Eero Lahelma: Hoitoonohjausmallit työpaikoilla (Referral systems for problem drinkers in seven industrial plants). 1976, 24 p.
- 95 ★ Matti Viikari: Näkökohtia alkoholin yhteiskunnallisen paikan määrittämisestä (Towards determining the position of alcohol in society). 1976, 20 p.
- 96 ★ Jussi Simpura: Ravintolassa käymisen tiheys Suomessa vuosina 1968, 1969 ja 1974 (The frequency of restaurant visits in Finland in 1968, 1969 and 1974). 1976, 26 p.
- 97 ★ Klaus Mäkelä: Väestön alkoholipoliittisia mielipiteitä Suomessa vuosina 1953-1974 (Public opinion on alcohol policy in Finland, 1953-1974). 1976, 17 p.
- 98 Klaus Mäkelä: Alkoholipoliittisen mielipideilmaston vaihtelut Suomessa 1960- ja 70-luvulla (Fluctuations in the climate of opinion concerning alcohol control measures in Finland in the 60's and 70's). 1976, 78 p.
- 99 Kari Palonen: Työnjaosta Lapinjärven huoltolassa - Aatekriittinen tutkimus (Division of labour at the Lapinjärvi institution for alcoholics. A critical study). 1976, 63 p.
- 100 ★ Pirkko Sirén, Toivo Pöysä & Kettii Bruun: Huoltola-aikojen lyhentäminen (Shortening the length of stay in institutions for alcoholics). 1976, 15 p.
- 101 ★ Riitta Wallenius: Yhteiskuntatilastot ja tiedontarve. Piirteitä suomalaisen tilastotoimen ja erityisesti alkoholitilastojen kehityksestä autonomian aikana (Social statistics and information needs. Features of Finnish statistics, especially the development of alcohol statistics during the era of autonomy). 1976, 101 p.
- 102 ★ Klaus Mäkelä & Sirkka-Liisa Säilä: Alkoholiehtoisten majoitusten jakautuminen eri viranomaisten kesken (The distribution of shelterings related to alcohol use among different authorities in Finland in 1960 and 1970). 1976, 14 p.
- 103 Klaus Mäkelä & Matti Viikari: Notes on alcohol and the state. 1976, 32 p.
- 104 ★ Teuvo Peltoniemi: Vuodenalun 1975 hinnankorotusten vaikutuksia helsinkiläisten alkoholinkäyttöön (The effects of the price increases in the beginning of 1975 on the consumption of alcohol in Helsinki). 1976, 32 p.
- 105 ★ Irma Sulkunen: Raittiusliikkeen synty Suomessa (The origin of the temperance movement in Finland). 1977, 149 p.
- 106 ★ Hannu Mäkinen: Päätöksentekoprosessi keskioluen kunnallisten yleissuostumusten peruuttamisen yhteydessä (The decision-making process in revoking communal permission to sell medium beer). 1977, 113 p.
- 107 ★ Jussi Simpura: Juomatapatutkimus -76:n tutkimusaineisto (The data collected in the 1976 drinking habits study). 1977, 20 p.
- 108 ★ Ilpo Koskikallio: Suomen anniskeluravintoloiden kehitys vuosina 1967-1975 (The trend of development for licensed restaurants in Finland from 1967-1975). 1977, 41 p.
- 109 ★ Lis-Marie Kruse: Erikoisympäristö - alkoholinkäyttö - kontrolli. Havainnointitutkimus matkustaja-aluksista (The use of alcohol and its control on board passenger ships. An observational study on passenger ferries). 1977, 55 p.
- 110 ★ Oiva Turpeinen: Viinaan kuolleet Suomessa vuosina 1878-1917 (Alcohol mortality in Finland during 1878-1917). 1977, 116 p.
- 111 ★ Pirkko Sirén: Nuorisosema päihteitä käyttävien nuorten hoitoyhteisönä (The youth clinic as a treatment community for young drug and alcohol abusers). 1977, 305 p.
- 112 ★ Erkki J. Immonen: Päihdetutkimus Suomessa vuosina 1975-1977 (Alcohol and drug research in Finland during 1975-1977). 1978, 334 p.
- 113 ★ Sirkka-Liisa Säilä: Lauantaisulkemiskokeilu ja juopumushäiriöt (A trial closure of Alko retail shops on Saturdays and disturbances caused by intoxication). 1978, 32 p.
- 114 ★ Jussi Simpura: Suomalaisten juomatavat vuosina 1969 ja 1976. Kulutetut alkoholimäärät ja alkoholin ongelmaikäyttö (Finnish drinking habits in 1969 and 1976. Alcohol consumption and alcohol problems in demographic groups). 1978, 127 p.
- 115 ★ Jussi Simpura: Alkoholii suomalaisten mielissä. Alkoholiasenteet, alkoholin käytön perustelut ja alkoholimielipiteet vuosina 1969 ja 1976 (Alcohol in Finnish minds. Attitudes, motives and opinions in 1969 and 1976). 1978, 45 p.

- 116 **Salme Ahlström-Laakso & Esa Österberg:** Alkoholihaitat alkoholikontrollipolitiikan näkökulmasta: viralliset haittaosoittimet alkoholihaittojen kehityksen kuvaajina (Alcohol damage in the perspective of alcohol control policy: Official indicators describing the development of the detrimental effects of the use of alcohol). 1978, 26 p.
- 117 **Salme Ahlström-Laakso & Esa Österberg:** Alkoholien kulutus Suomessa vuosina 1960-1976 (Consumption of alcohol in Finland 1960-1976). 1978, 80 p.
- 118 **Toivo Pöysä & Jussi Simpura:** Kotiviinin valmistus ja käyttö 1970-luvun puolivälissä (Homemade wine in Finland in the mid-seventies). 1978, 18 p.
- 119 **Kari Poikolainen:** Näkökohtia sosiaalilääketieteellisestä alkoholitutkimuksesta (Remarks on socio-medical alcohol research). 1978, 60 p.
- 120 **Jussi Simpura:** Suomalaisten juomatavat vuosina 1969 ja 1976. Juomiskertojen lukumäärä ja ominaisuudet (Finnish drinking habits in 1969 and 1976. The number and attributes of drinking occasions). 1978, 229 p.
- 121 **Pekka Sulkunen:** Developments in the availability of alcohol beverages in the EEC countries. 1978, 93 p.
- 122 **Hannu Mäkinen:** Kunnallisten keskiolutkieltojen vaikutukset. Tapaustutkimus viidessä kunnassa (The effects of revoking communal permissions to sell medium beer. A case study in five Finnish municipalities). 1978, 170 p.
- 123 **Hannu Takala:** Kliinisen humalatutkimuksen tehtävät. Tutkimus liikennejuopumusrikosten esitutkinnasta ja todistelusta (The functions of the clinical examination of drunken drivers. A study of pre-trial investigations and the presentation of evidence in drinking-and-driving cases). 1978, 135 p.
- 124 **Ilkka Taipale:** Poikkeavien alkoholin käyttäjien nimetykset ja määrittelyt Suomessa (Terms applied to deviant drinkers in Finland). 1979, 77 p.
- 125 **Esa Österberg:** Recorded consumption of alcohol in Finland, 1950-1975, 1979, 38 p.
- 126 **Klaus Mäkelä:** Unrecorded consumption of alcohol in Finland, 1950-1975. 1979, 88 p.
- 127 **Marja Holmila:** Maalaiskylän asukkaat ja alkoholi. Tutkimus alkoholin liittymisestä erään maalaiskylän asukkaiden elämäntapaan (Country villagers and alcohol. A study into alcohol, ways of life and the inhabitants of a country village). 1979, 241 p.
- 128 **Salme Ahlström:** Trends in drinking habits among Finnish youth from the beginning of the 1960s to the late 1970s. Paper presented at the Epidemiology Symposium of the 25th International Institute on the Prevention and Treatment of Alcoholism, June, 18-22, 1979, Tours, France. 1979, 21 p.
- 129 **Juha Partanen:** On national commodity consumption patterns and the use of alcohol. 1979, 44 p.
- 130 **Klaus Mäkelä:** The uses of alcohol and their cultural regulation. Revised version of a paper presented at the 25th International Institute on the Prevention and Treatment of Alcoholism, Epidemiology Section, Tours, France, June 18-22, 1979. 1979, 14 p.
- 131 **Klaus Mäkelä:** A note on holocultural generalizations and historical fluctuations in aggregate drinking. 1979, 8 p.
- 132 **Erkki Immonen:** Ostajaintarkkailun aika (The customer surveillance period). 1979, 44 p.
- 133 **Pekka Sulkunen:** Abstainers in Finland 1946-1976. A study in social and cultural transition. 1979, 84 p.