Statistical and Social Inquiry Society of Ireland

The Aged in Three Western Societies

(A comparative social survey on living conditions and behaviour of the aged in Denmark, Great Britain and U.S.A.)

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(Read before the Society on January 12th, 1966)

GENERAL BACKGROUND OF THE STUDY

Through the last fifteen years important new territory has been conquered in social gerontology in most of the countries of the Western world. A large number of specialized studies of particular problems as well as some general surveys have been undertaken with a view to establishing a body of knowledge on living conditions and behaviour of the elderly and on the relations between biological and environmental factors in the process of aging.

Social gerontology is, however, still at an early stage of development. Most countries lack basic facts on many aspects of the life of elderly people, and theoretical generalizations regarding the social factors in the aging process are only beginning to be established.

The result is that a number of untested stereotypes and myths have grown up round the elderly in Western countries. Some of these common beliefs may be correct; others may not stand up to a study of facts. These stereotypes and myths are repeated over and over again, not only in popular writings, but also in more serious literature. They are influencing the general attitudes to the problems of the elderly in our societies, and they have an impact on public policy. The picture which is painted through these stereotypes is as a whole pessimistic, indicating that the life of elderly people has undergone "catastrophic changes" and that most elderly people in Western countries are socially and psychologically in a bad state, though certain features are supposed to be more alarming in some countries than in others.

Among the more frequently expressed judgments regarding the situation of the elderly in the three countries I am most acquainted with are the following:

- (1) most elderly people in all three countries are isolated and lonely; an important reason for this is that children when they leave the parental home have little contact with their parents or other older family members;
- (2) most elderly people are in a bad health condition;
- (3) because of the differences in the system of health services, the

- elderly in Denmark and Great Britain use the medical services more than in the United States;
- (4) essentially more elderly people are institutionalized in Denmark than in the United States and Great Britain:
- (5) most elderly people are living in a poor economic condition, but they are worse off in the United States and Great Britain than in Denmark:
- (6) most elderly people want to go on working, but they are barred from doing so because of negative attitudes towards elderly people in industry or because of fixed retirement and pension ages.

Some of these common beliefs have been challenged through empirical research during recent years, but most of these studies have been limited to particular local communities or social groups, and it is doubtful to which extent they can have a wider application. Neither do they easily lend themselves to cross-national comparisons, which is clearly demonstrated in the comparative study "Aging in Western Societies" (Ed. by Ernest W. Burgess, University of Chicago Press, 1960) which had to rely upon material of a very heterogenous character. Only the summary data from demographic and economic statistics have been fully comparable, while on most other matters comparisons have had to be based on fragmental evidence of local samples or at the best on national sample surveys which, however, used different questionnaires and research designs.

As a result scientific accumulation has been hampered, and the development of empirically tested generalizations regarding behaviour patterns of the elderly and comparisons of their relation to environmental factors have been retarded.

It was against this background that discussions took place in the late 1950s under the auspices of the Social Research Committee of the International Association of Gerontology. The need for comparable crossnational surveys of old age was brought in the foreground. The result was that a team was established in 1960 consisting of researchers in Denmark, Great Britain, and the United States, which decided to carry out such surveys in each country which should be tightly co-ordinated in design and content with a view to a maximum degree of comparability.

Because of the great interest shown by United States National Institute of Mental Health in developing international research in the field of gerontology, applications were made to the Institute for grants for financing of the surveys in each country and for the regular co-operation between the investigators. The National Institute of Mental Health awarded its first grants for the surveys in 1961. Very substantial grants have been awarded during the years 1961–65, first by the National Institute of Mental Health, and later by the Community Health Services Division of the Bureau of State Services of the United States Public Health Service. The responsible investigators were: for the United States—Ethel Shanas, University of Chicago; for Great Britain—Peter Townsend, University of Essex, and Dorothy Wedderburn, University of Cambridge; for Denmark—Henning Friis, Poul Milhoj and Jan Stehouwer,

Danish National Institute of Social Research. Field work was carried out in the United States by the National Opinion Research Center and data-processing by the Operational Analysis Center, both at the University of Chicago. In Great Britain field work and data-processing were provided by the Government Social Survey and in Denmark by the National Institute of Social Research.

The detailed preparations of the surveys began in spring 1961. Interviewing was undertaken in all countries in spring and summer 1962. The publication of the results will take place in early 1967.

AIMS AND AREAS OF THE SURVEY

The aim of the cross-national survey was, first, to provide a basis for comparisons between living conditions and attitudes of elderly people aged 65 and more in countries with somewhat different economic, social, and cultural patterns including differences with regard to the structure of health services, social security systems, and family relations.

Second, the national and international data should yield useful information for social policy decisions in the gerontological field in each country by giving a more balanced and varied picture of the state of the elderly than the generalized stereotypes exemplified above. The surveys should be able to indicate the extent of groups with particular difficulties and to point to welfare problems among the elderly.

Third, the study should contribute to the exploration of some general and specific hypotheses on integration and disintegration of the aged in Western societies. The authors hoped to reach certain conclusions on the influence of external factors on the life of elderly people, and hence also to reveal some similar traits which are connected with aging as such irrespective of specific national situations.

At the beginning of the survey the following broad areas were chosen for investigation:

- (1) health status and utilization of health and welfare services;
- (2) family and other social relationships;
- (3) employment and retirement;
- (4) economic situation;
- (5) housing.

The latter area was only to a very limited extent included in the U.S. survey because a special census of housing conditions of elderly people was undertaken in conjunction with the 1960 census. In the following the major problems investigated in each of the five areas will be listed.

1. Health status and utilization of health and welfare services

Areas covered in the questionnaire: (a) general level of physical and mental well-being (symptoms, diseases); (b) degree of incapacity for

¹ The report will be published as E. Shanas, P. Townsend, D. Wedderburn, H. Friis, P. Milhoj and J. Stehouwer, *Older People in Three Industrial Societies* (Atherton Press New York and London 1967).

selfcare (using a specific rating of mobility and of capacity to perform personal and household activities); (c) nature and frequency of routine help provided in the home; (d) care provided in cases of illness.

2. Family and other social relationships

Areas covered in the questionnaire: (a) basic data as to old persons' marital status, length of widowhood, etc.; (b) social setting to which old persons belong (composition of household shared and description of family structure and cohesion, including number of children, siblings, and other close relatives, and their proximity); (c) family interaction, i.e., frequency and nature of contact between the old persons and their children and other relatives; (d) measurement of old persons' social isolation in the objective sense of lack of contact with other people, together with some indication of their subjective feelings of loneliness.

3. Employment and retirement

Areas included in the questionnaire: (a) nature of present/past employment (specification of occupation, industry, hours worked, regular or seasonal employment, etc.); (b) age at and reasons for retirement; (c) attitudes towards retirement and towards alternative employment.

4. Economic situation

Areas covered in the questionnaire: (a) size and source of income; (b) size and composition of assets.

5. Housing

Areas covered in the questionnaire: (a) type of accommodation in formal terms (single or multiple household, dwelling house, flat or bungalow, etc.); (b) condition or standard of accommodation (age, amenities); (c) attitudes towards present accommodation and possible alternatives.

THE PROCEDURES OF THE SURVEY

The survey is based on structured interviews with three national samples of people aged 65 and over and living in private households. The number interviewed was about 2,500 in all countries. The sampling method was area probability samples in which every elegible person had an equal chance of being interviewed. Where persons in the sample were at home but too sick to be interviewed an interview was, wherever possible, conducted with the person responsible for the sick older person.

Of the questions in the questionnaires from 75 to 90 per cent are "cross-national" questions. In addition, each of the national questionnaires contains a number of questions of particular national interest.

The cross-national questions are comparable by content, not in their national formulation. Differences in national style, way of talking and

approach, are reflected in each national questionnaire. No effort has been made to "translate" questions literally. People are "dizzy" in the United States, "giddy" in Great Britain, and "svimmel" in Denmark. "Giddy" makes no sense in the United States, just as "svimmel" makes no sense in Great Britain or the United States. The content of each question has been discussed over and over again in order to secure comparability in answers. Furthermore, in order to secure the same attitude on the part of the respondents throughout the interview (the same "atmosphere") the questions have been grouped in the same order in the questionnaires used in each of the three countries.

A number of other measures was taken to secure a high degree of comparability. All important variables, concepts and terms were defined in the same way, both in the questionnaires and in tabulations. The interviewers were as far as possible instructed in the same way. The same procedure of coding was followed on coding of all "open questions", and standardized methods have been used in the tabulation process.

Interviewing was undertaken in approximately the same season of 1962. In Denmark mid-April to early July; in Great Britain mid-May to July; in United States mid-May to August.

There are, of course, certain problems involving comparability which could not be entirely overcome in the surveys. In the first place, research was limited to those living in private households. Old people living in institutions were not interviewed (except in an additional survey in G.B.). In Great Britain and the United States the percentage of elderly people with long stay in hospitals, nursing homes, residential homes and other institutions amounts to 3.6 and 3.7 per cent respectively. In Denmark the percentage is 5.3. The oldest and the most infirm members of the elderly population are therefore not fully represented in the results. Some of the differences found between the three countries, say, in the proportions of old people in private households who were bedridden or isolated from their families, may be partly attributable to the different proportions of the elderly population living in institutions.

In the second place, there were refusals and non-contacts in all three countries amounting to about 15 per cent in all countries. A comparison between certain key characteristics of the respondents and where known of the non-respondents, suggests that the differences are on the whole small. Comparisons of the responding sample with official demographic data show a very close agreement.

The study was from the beginning to the end carried out in close teamwork between researchers coming from different national environments. They developed a common framework and questionnaire. After having agreed on the many minute points of coding and tabulation, they discussed the drafts of the chapters of the forthcoming book which they divided among them. The concerted action of the team was obtained through hundreds of letters and fourteen meetings, each of several days' duration.

This procedure is time-consuming and requires money for travel. It presupposes great frankness in discussions on procedures, but also a

desire on the part of each of the national groups to understand the preoccupations of other participants. It has, of course, not been possible to meet all national wishes, and compromises have been necessary regarding the areas covered by the study as well as on many details.

The team has, however, found that this procedure has much to its merit compared with the alternative possibility, where research design, questionnaires, etc., developed in one country, are transferred to other countries without previous consultations between researchers in the other countries involved and without close co-operation regarding the analysis and presentation of the results.

The continual access to national experiences and the mutual professional advice have undoubtedly rescued the study from some of the mistakes which may easily happen in cross-national studies which are carried out without sufficient participation from social scientists in the various countries in which the research is taking place.

It is the hope that the survey will be of some use for other studies in the field of social gerontology. In this connection it is encouraging that new studies drawing upon the research design of the present survey are already under way in Poland and Israel.

The organizational aspects of the experiment in international research co-operation may be of interest for the general development of crossnational research, for which social scientists in recent years have shown an increasing interest.

The work can also be viewed as an example of research co-operation between economists and sociologists. The economists have concentrated on the design and analysis of the parts of the survey dealing with income and income sources, employment and retirement, while the sociologists in particular have devoted themselves to health and welfare, living arrangements, and family relationships. All members of the teams, whether economists or sociologists have, however, been participating in all aspects of the design of the study and have taken part in discussions on all chapters, which has been a very useful and pleasant experience.

SOME OF THE RESULTS OF THE SURVEY

It is not possible in a brief paper to cover all the many findings of the study. I will confine myself below to mention some of the results which can throw light upon the stereotypes regarding the elderly which I listed at the beginning of this paper.

Stereotype 1: Most elderly people in all three countries are isolated and lonely; an important reason for this is that children when they leave the parental home have little contact with their parents or other older family members.

The survey shows that about three-quarters of the elderly couples and about one-half of the single persons are living alone. In all three countries about 80 per cent of the elderly people have children alive.

In Great Britain 42 per cent of the elderly persons (couples counted as

two persons) with living children live together with their children. For the United States and Denmark the comparative figures are 28 per cent and 20 per cent. It is, therefore, correct to say that most old people in the three countries live alone. The proportion living alone is falling with increasing age and increasing degree of incapacity.

The fact that most aged are living alone does not necessarily mean that they are isolated. Almost 80 per cent of those with living children had at least one child living within 30 minutes transport distance. About two-thirds of the elderly people with children alive had seen at least one child within the last 24 hours. Only 6 per cent of the elderly in Denmark and Great Britain and 10 per cent of the elderly in The United States has not seen a child within the last month (but several of these had seen a sibling or other relative). Of those with no children more than one-half had seen a sibling or another relative within the last week. Single persons more often than married had seen a child within the last week and the frequency of contact is rising with age of the old persons.

Relationships of children to their parents tend to be more loose-knit in Denmark than in the other two countries. Fewer of the elderly share a household with children; fewer give and receive help and fewer stay overnight with children or have children to stay.

Only a minority of the elderly say they are often or sometimes lonely, varying from 17 per cent in Denmark to 28 per cent in Britain and 30 per cent in U.S.A.

The conclusion which can be drawn from the survey is that although most elderly people in the three countries are living alone, it is only a small minority of the elderly who live in extreme isolation. A larger number, but still a minority, feel lonely; but isolation as such does not appear to explain loneliness, but rather desolation, usually through the loss of a spouse or another close relative.

Stereotype 2: Most elderly people are in a bad health condition.

The survey is as earlier indicated confined to persons living in private households. This means that a number of those who are particularly incapacitated is not included in the survey. The proportion of elderly people in institutions in the three countries was, however, not very significant. In all of the three countries far more old people are bedfast and house-bound at home than are residents in institutions. But the number of bedfast and housebound at home in the survey does not amount to more than 10 per cent of the elderly persons in all three countries, whereas 90 per cent were ambulatory. About 80 per cent could go outdoors without difficulty, and about one-half of the elderly in Denmark and Great Britain and two-thirds of the elderly in the United States reported no functional incapacity. Only about 30 per cent of the elderly had been ill in bed last year.

There is, of course, considerable increase in incapacity with growing age. In all three countries, persons aged 65-69 are functioning quite well as measured by the index of incapacity which has been used in the survey. Six to seven of every 10 persons in this age group report that they

had no difficulty whatsoever in going out-of-doors, walking stairs, washing and bathing, dressing and putting on shoes and in cutting their toenails. Beginning with the cohort aged 70–74 in Denmark and in Great Britain, and that aged 75–79 in the United States, there is a change in physical capacity among the elderly. In the age cohort 80 and over only two of every 10 men and four of every 10 women in Denmark report no incapacity. In Great Britain three of every 10 men and two of every 10 women in the oldest age group report no incapacity, but in the United States five of every 10 men and four of every 10 women report no incapacity.

This indicates some differences in the health of the elderly people between the three countries. Elderly people in the United States are less likely than elderly people in either Denmark or Britain to be house-bound or restricted in their mobility or to report incapacity in functioning. These differences in reported incapacity of the elderly persons in the three countries are particularly marked in the age groups over 75. Whether these differences in self-reports of incapacity between older Americans and older Danes and Britains represent "real" differences in physical status or to what extent they result from a feeling of older Americans, that irrespective of age and infirmity it is necessary to be active and wrong to admit to illness and incapacity, cannot be ascertained through this survey.

The conclusion which one can draw from these and other findings of the survey does not confirm the proposition that most elderly people are in bad health condition. The majority of the elderly between 65 and 75 is still in active function; it is only after that age that the deterioration is rapid.

Stereotype 3: Because of the differences in the system of health services, the elderly in Denmark and Great Britain are using the medical services more than in the United States.

The survey does not confirm this hypothesis as there are no marked differences with regard to use of the medical services by the elderly in the three countries. The proportion of the elderly who had seen a doctor within the past month was only 22 per cent in Denmark against 34 per cent in Great Britain and 30 per cent in the United States. Those who had been hospitalized in last year amount to 11 per cent in Denmark, 8 per cent in Great Britain and 13 per cent in the United States.

A large number of elderly people had not seen a doctor for a year or more. This group includes roughly one-third of all old people in the three countries.

Stereotype 4: Essentially more elderly people are institutionalized in Denmark than in the United States and Great Britain.

As mentioned earlier the number of persons in age 65 and over who were residents in institutions amounted to 5.3 per cent of the elderly population in Denmark against 3.6 per cent and 3.7 per cent in Great

Britain and the United States. This figure includes patients in long-term hospitals, mental hospitals, nursing homes and residential homes.

While the percentage of elderly Danes in institutions is somewhat higher than in the two other countries the total number is not very high. The reason why many have got the impression that a considerable part of the aged in Denmark is in institutions is probably that the Danes have been boasting for many years about their old peoples' homes with the effect that people from many countries have made pilgrimages to study these famous homes, while other countries have been disgusted by the hear-say that young people in Denmark force their parents into institutions.

Stereotype 5: Most elderly people are living in a poor economic condition, but they are worse off in the United States and Great Britain than in Denmark.

Through the survey a rather detailed investigation has been made of income sources of the elderly in each country. It is clearly demonstrated that the elderly people do not form any homogeneous group where income is concerned.

Most elderly people in all three countries have other income sources besides pensions or assistance from Government. Only one-fifth of the elderly persons in Denmark was wholly dependent on Government benefits while one-third in Great Britain and United States depended on Government benefits.

The median income of the elderly in percentage of average annual earnings in manufacturing industry was the following in the three countries.

	Couples	Single men	Single women
Denmark	52	32	30
Great Britain	47	29	23
United States	52	26	18

In the presentation of the income figures Dorothy Wedderburn has made an effort to estimate the proportion of the elderly who have an income under certain minimum budgets. For the United States she has used the minimum budget established by Lenore Epstein in the Social Security Administration which for 1961 amounts to \$1,800 a year for couples and \$1,300 for single persons. Thirty per cent of the elderly couples, 47 per cent of the single men and 60 per cent of the single women in the United States have incomes below this minimum.

For Great Britain the National Assistance Board scale rate plus rent allowance has been used as a measure of subsistence income. This amounted in 1962 to £291 a year for a couple and £196 for a single person. The result was that 23 per cent of the couples, 29 per cent of single men and about one-half of the women had incomes below this level.

For Denmark no measure of a subsistence income is available, but

using the British standard converted to Danish kroner, it turns out that about 20 per cent of the Danish couples, 16 per cent of the single men and 12 per cent of the single women fall below the British National Assistance standard.

The various comparisons between the countries based on the survey data indicate that the absolute living standards of elderly people in the U.S.A. are, on average, higher than in the two European countries, which reflects the higher levels of living generally of the United States population. Income inequalities within the elderly population tend to be greater in U.S.A. than in Denmark and Great Britain. Income inequalities as between the elderly retired and the rest of the population are smaller in Denmark than in the two other countries.

The survey does not confirm the proposition that most elderly people in the three countries are living in poor economic conditions. A considerable proportion in U.S.A. and Great Britain have, however, incomes below generally accepted poverty lines; this is in particular the case for single women. The percentage of substandard elderly is smaller in Denmark and the position of elderly women is here markedly better than in the two other countries.

The differences in the economic situation of the elderly between the three countries are also pictured through the opinion of the elderly regarding their economic situation. Only 17 per cent of the elderly in Denmark, against 51 per cent in Great Britain and 34 per cent in United States answered that they "are worse off financially now than when they were 55-60 years old".

Stereotype 6: Most elderly people want to go on working, but they are barred from doing so because of negative attitudes towards elderly people in industry or because of fixed retirement and pension ages.

A considerable proportion of the elderly men goes on working after the national pension age which is 65 years in Great Britain and the United States and 67 in Denmark.

The results from the survey regarding labour force participation of men are shown in the following table:

LABOUR	FORCE	PERCENTAGE	IN	AGE	GROUPS	(MEN)
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Age	United States %	Great Britain	Denmark %
65–66	51	49	76
67–69	42	37	52
70–74	29	24	31
75–79	19	15	18
80–	15	10	15
All men 65 and over	32	28	38
Total No.	(1,081)	(1,004)	(1,145)

The elderly Danes are working longer than the American and British. The main explanations for this are the differences in pension age and the higher proportion of farmers in Denmark.

With regard to the reasons for retirement the survey shows that compulsory retirement ("reached retirement age" and "job eliminated") is less frequent in Denmark (about 20 per cent) than in Great Britain and the United States (about 35 per cent). Poor health, including "too tiring work" is the major reason given for retirement. This is more often mentioned in Denmark (57 per cent) than in Great Britain and the United States (about 45 per cent).

According to the answers of the elderly persons only a minority of the retired men wants to go back to work. The proportion indicating interest in work was 10 per cent in Denmark, 20 per cent in Great Britain and 26 per cent in the United States.

Among those recently retired a higher proportion would prefer some form of work, but with increasing length of time from the point of retirement this proportion becomes much smaller.

The proposition that most elderly people want to go on working can not be substantiated and ill-health is a more important reason for retirement than negative attitudes towards elderly in industry and fixed retirement and pension ages.

DISCUSSION

- Rev. J. Kavanagh: It is a great pleasure for me to speak to this paper for several reasons.
- (1) It is nice to meet Mr. Friis again. He made a great many friends here during his recent sojourn. Everybody was impressed by his efficiency and Danish charm.
- (2) It is salutary for us all to have heard this lecture and we look forward eagerly to the publication of the book on the whole project.
- (3) It is good to see a practical example of the sort of research Mr. Friis so ably recommended in his Report on the needs re Irish Research. This paper illustrates for us what can be done, what ought to be done and how it should be done.
- (4) I am especially pleased to note the collaboration of economists and sociologists in this survey (Page 2). This is the sort of team-work so vitally necessary in our own country. It is worthy of note that the recent Report "Investment in Education" recommends this policy.

I was intrigued by the list of untested stereotypes and myths which have grown up around the elderly in Western countries. We all have our "impressions" of what is wrong. Very often we have no scientific basis for these impressions. The current controversy about the novelist's depiction of social ills and the scientific research worker's analysis of the same problems is perhaps relevant on this particular point. At least we can say that the novelist's impact is generally far stronger than that of the scientific appraisal, which tends to be jejune and not highlighted by colourful or dramatic language.

As a priest I know that there are certain "myths" about the aged among the clergy. One of the principal mysteries of religion is the longevity of parish priests! Another myth is that when parish priests reach 70 they will live forever or at least till 90. These are obviously "impressions" of the younger clergy, but there has not been any scientific study of this matter in this country.

Looking at the list of stereotypes or "myths" listed in Mr. Friis's paper, I think these would be the prevailing impressions here in Ireland also.

One factor which affects the condition of the aged in this country (and which is peculiar to this country), is the very high proportion of those aged 65 and over here. In 1841 the percentage was 3.1 and in 1951 this had risen to 10.7. It is now 11 per cent. The improved life expectancy and the emigration of young people are responsible for the change. This means that the working population here has to carry a much greater load of old people proportionally than in other countries. So we would expect that the old would be less well-off economically (i.e., income-wise) and also from the point of view of services for the aged—I think of housing, institutional care, domiciliary services, etc. They are possibly better off in the matter of "loneliness" and "isolation", as many believe there are still strong family ties in this country.

One thing is clear, however, that we have not got sufficient basic facts. There are several Irish studies which may help in certain areas of the problem of the aged.

- (1) The Departments of Social Medicine in U.C.D. and T.C.D. are investigating the utilization of beds in the teaching hospitals of Dublin—it is hoped to show, for example, the extent of hospitalization and the reasons why the aged must stay in hospital rather than go to unsatisfactory accommodation. This is only, of course, one aspect of the study.
- (2) The National Organization for Rehabilitation has been considering the problem of the aged for some time.
 - (3) Various County Medical Officers have garnered useful information.
- (4) Tuarim is shortly to produce a paper by Mr. Tony Coughlan, T.C.D., on the Social Services generally in this country.
- (5) A Community Study in U.C.D. on a new housing estate asks questions about contact with relatives, etc.
- (6) A good deal of very pertinent information was also gathered in the last General Census of 1961.

But, I think we can all be agreed that there is the need for coordination and also a more general collection of basic facts about the aged here. Perhaps the new Research Institute which is to be set up, mainly due to Mr. Friis's advocacy, will undertake such a scientific study.

As I have said I am extremely pleased with this paper. I have, however, one or two queries. The findings regarding the desire of elderly people to go on working seem to me a little questionable. The people asked were those who had been retired. People learn to accept the inevitable. But I wonder if these people had been asked a few years before retiring age and if they had the possibility of continuing to work, would they answer somewhat differently?

Obviously one can't ask every possible question in such a survey as Mr. Friis has described. But there was one I would like to have seen asked—do old people prefer to be housed together or integrated in a community with younger people and especially young children? Last year in Finland I visited some of their wonderful housing estates and there I noticed that in the more recent schemes the old were integrated with the young—it was found from experience that this is what they preferred.

One could go on riding one's own hobby horses ad infinitum. Suffice it now for me to conclude with the expression once more of my profound gratitude (and I know I am expressing your feelings also) to Mr. Friis for this fascinating trans-continental study.

Dr. R. C. Geary: It is evident that this is a gathering of friends of Dr. Friis who is quite the nicest Viking ever to land on our shores. This remarks is pertinent because this year, as everyone knows, we celebrate the 950th anniversary of the Battle of Clontarf. Incidentally, modern historical scholarship shows that the victorious King Brian Boru had as many Danes fighting for him as against him which indicates that Dr. Friis's fellow-countryment have always been sensible people.

Social surveys of the type described in Dr. Friis's interesting paper, are very expensive per unit surveyed, so that it is scarcely surprising that-most surveys extend to only about 2,000 or 3,000 as in the case of the three surveys mentioned in the paper. No significance can be attached to smallish differences in percentages. For instance, if 10 per cent be found in any matter from a survey of 2,500 units, the true percentage might reasonably lie between 8.8 and 11.2 per cent.

Accordingly, in social surveys, the fullest use should be made of Census of Population material, or a large sample thereof. It is quite surprising (as the speaker found for his Society paper many years ago about families in Ireland) how much information can be derived from the ordinary household budget; for example, the individual on the Census form can be related to family size, occupation of head of household, number of rooms in house, age, sex, etc. Some of the percentages quoted by Dr. Friss could be obtained from the Census of Population. There are many aspects (e.g., psychological and of incapacity), however, which can only be dealt with by a sample survey.

I am distrustful of results based on a prescribed sum of money deemed to apply uniformly to all persons as a minimum living requirement. I believe that the notion derives from Rowntree in his famous York surveys. I am also aware that, in this Society, the approach produced, on one occasion, an absurd result. I suspect that the trouble is that everyone has his own minimum standard.

Dr. C. E. V. Leser: An important point made in the paper is the fact that the number of old people who are in economic or psychological need is limited and therefore it seems feasible to deal with their problems. If the full version of the study referred to throws some light upon what kind of old people are in need, this should be even more valuable.