

**MEASUREMENT, MEASURES AND THE MILLENNIUM
THE SOCIETY'S ACTIVITIES IN A LONG PERSPECTIVE**

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1 INTRODUCTION

"But the age of chivalry is gone That of sophisters, economists and calculators has succeeded " (Edmund Burke, 1790)

Statistical Ideas before 1847

If the history of Dublin as a city is considered as commencing from 988 A D , some eight centuries of its first millennium had passed before Burke made this frequently quoted judgement on his own time For many years out of those centuries the state of Ireland was such as to conduce more to deeds of chivalry – or wickedness – than to philosophy or calculation It may well be, as has been suggested (Little, 1957), that there was trade at the ford of the hurdles even before the Vikings came but if so its extent went unrecorded and its characteristics unanalysed Even in the Middle Ages such scholars as survived alongside the knights were almost all men of the Church They were indeed not unconcerned about economic matters, but their purpose was not to measure or analyse them, rather it was to pronounce judgement upon them from the standpoint of moral theology

Nevertheless, the economists and calculators had begun their work well before the day when Burke made his comment In recent times the old-established view that the origin of political economy as a scientific and independent discipline could be dated from the publication of Smith's *'Wealth of Nations'* in 1776 has undergone considerable revision Nowadays historians of ideas tend to see that development more as a by-product of the 'scientific revolution' of the seventeenth century in the fields of mathematics, physics and astronomy As one of those historians has said "the scientific revolution that accompanied the restoration of Charles II owed much of its vigour to faith One of the chief elements of this faith was the simple belief that many things in nature, as yet mysterious, could and should be measured precisely Men suddenly persuaded themselves that dimensions which had always been matters of conjecture could be counted or weighed or somehow stated in precise numbers" (Letwin, 1963, p 99) It did not take long for this simple belief to be extended to things in society as well as things in nature and so in the process of making the study of social and economic affairs into a science it was the calculators who were first on the scene

The verdict of history has been that the leading figure in this group was Sir William Petty (1623–87), whose activities in Ireland after 1652 had made him the proprietor of 270,000 acres in Kerry by the time of his death. Some of this he had obtained as payment for his famous Down Survey, completed in 1656, the first large scale attempt to make a scientific survey of lands, and a formidable achievement in measurement. Because of this and because of his constant stress on the importance of “number, weight or measure” in the “Political Arithmetick” which he developed, Petty is often seen as chiefly if not solely a data-gatherer (cf. Ambirajan, 1988, p. 14), but his work involved no small amount of theorising and generalising, so that Roncaglia seems to come nearer the truth in saying that “for Petty it was not only a question of *recording* and *describing* reality ‘in terms of number, weight or measure’ but rather to *express* reality in such terms in order to identify its principal characteristics” (Roncaglia, 1985, p. 21).

It may have been partly for this reason that political economy in the eighteenth century did not make much use of political arithmetic, for all its initial promise of objective measurement of economic forces. For when the data necessary to express reality in quantitative terms were not available, Petty seldom hesitated to overcome the difficulty by using often dubious approximations. It was probably because of this that Adam Smith confessed “I have no great faith in political arithmetick”, supporting his scepticism with a quotation from Cantillon – “There is no branch of knowledge in which one is more subject to error than Statistics when they are left to imagination, and none more demonstrable when they are based upon detailed facts” (Smith, 1776, 1976 ed., p. 535). Certainly it was from philosophers like Locke and Hume rather than calculators like Petty that most of the economists of the eighteenth century derived their methodology.

Ireland had at least its fair share of economic commentators in that century. Indeed recently Professor Salim Rashid has sought to show that there was a complete Irish school of economic development in the period 1700–1750 (Rashid, 1985). While I am disposed to think that this may be too generous a judgement, and one which too readily imposes the categories of twentieth century thought on the eighteenth, there can be no doubt that distinguished thinkers like Swift and Berkeley, Prior and Madden were deeply concerned about the problem of Irish poverty and the measures which might be adopted to improve the condition of the country. One result of their concern was the formation in 1731 of the Dublin Society (later to become the Royal Dublin Society) “for improving Husbandry, Manufactures and other useful arts” in which Thomas Prior was a leading spirit. More than a century later there were to be many links between our own Society and the Royal Dublin Society and when we read of the latter in 1799 setting out to promote detailed statistical surveys of all the countries in Ireland, we may be tempted to see it as foreshadowing the work of our own Society. Yet that would be true only in the broadest sense, for these were essentially agricultural surveys, modelled on

the lines of Sir John Sinclair's *Statistical Account of Scotland* Sinclair, in the words of his biographer, used "the new word 'statistical' which he had met in Germany, for his information But whereas his German acquaintances used this word to mean information useful to the state, he meant it in a wider sense it was to cover all information concerned with the measure of the happiness of the people" (Mitchison, 1962, p 121)

By no means all of the information contained in Sinclair's surveys, or in those sponsored by the RDS, was in quantitative form, and this brings out the different meaning attached to the term "statistical" in the late eighteenth century At that time in Germany a whole discipline had grown up concerned with the comparative description of states – "Staatenkunde" (cf Westergaard, 1932, pp 4–15) Quantitative data played only a small part in the work of writers of this school, who were often contemptuously critical of the "Tabellenstatistik" developed by Petty's followers in the tradition of political arithmetic There still seems much to be said for the view, first put forward by August Meitzen just over a century ago, that statistics as social scientists tend to think of it now really developed from two roots – the English tradition of political arithmetic and the German tradition of *Staatenkunde* (Lazarsfeld, 1961, p 153)

The use of the word statistics to mean "numerical facts or data collected and classified" is stated by the *Oxford English Dictionary* to date from 1837 (Shorter OED, 1983 ed , II, p 2114) and in that sense it could be said that the quantitative approach pioneered by Petty and the other practitioners of political arithmetic had become the dominant one in the first half of the nineteenth century Certainly there is ample evidence that in that period in Europe generally there was greatly increased interest in the collection and analysis of numerical facts about the condition of society and that associated with this, particularly in Britain, "there was something like a common set of social attitudes leading to the advocacy of certain types of social reform" (Cullen, 1975, p 16)

In these matters Ireland's experience showed interesting similarities with and differences from, that of her neighbours in this period Dr Cormac O Grada has recently written that "Ireland before the Famine was almost a 'statistical dark age' in most respects, agriculture included" (O Grada, 1988, p 47) No doubt from the standpoint of today this is true enough, but in the perspective of history it needs to be remembered that it was probably almost equally true for every other country in Europe up to about 1830

After an incomplete census in 1813, the first full official Census of Ireland was taken in 1821 "The Census of 1831 was taken in a similar manner to that of 1821 It is worth noting, however, that as the enumerators expected to be paid, and many were actually paid, on the basis of the population enumerated, the population returns at this Census have always been regarded as somewhat exaggerated" (*General Report of the Census of Population, 1926, p 3*)¹ By contrast, the Census of 1841 "marked an enormous advance in scope,

manner of presentation, interest and in statistical technique" (ibid), incorporating many new features which came to be included in all subsequent Censuses, notably the classification of occupations. Another important step towards providing a quantitative picture of Irish economy and society was taken with the collection and publication of Agricultural Statistics which began in 1847–48 – too late unfortunately to record a profile of pre-Famine agriculture.

Yet before this there were many bodies, both private and public, which were publishing annual returns of their various activities. From 1844 onwards all these were collected into a noteworthy section of *Thom's Irish Almanac and Official Directory*, entitled "Statistics of Ireland" and running to nearly one hundred closely printed pages of figures. From a contemporary point of view, this could be seen as a small-scale copy of works like J R McCulloch's *Statistical Account of the British Empire* (1837), today we might be tempted to think of it as an elementary forerunner of more recent *Statistical Abstracts*. Be that as it may, the production suggests not only a good deal of industry in the collection of data but some degree of sophistication in handling them on the part of its compiler. Although the work was anonymous, we know that its compiler was William Neilson Hancock, (1820–1888) who was, amongst many other things the moving spirit in the foundation of our Society (*Journal SSISI*, 1889, IX, p 387) and this brings us on to the second part of this story.

2 OUTLINE HISTORY OF THE SOCIETY, 1847–1988

If one side of what has been called "the Era of Enthusiasm" for statistics from 1830 to 1849 (Westergaard 1932, p 136) was the increased and improved collection of quantified data by official institutions, the other was the foundation of statistical societies by private citizens.

Our own Society could be regarded as just one more of these many bodies, but in its history as with that of the origins of Irish official statistics, there are interesting differences from, as well as similarities to, the experience of other such societies. It was established in November, 1847, as the Dublin Statistical Society with Archbishop Richard Whately as its first President and William Neilson Hancock as its first Secretary (or, to be exact, one of its first two Secretaries). Hancock was then the occupant of the Chair of Political Economy in Trinity College, Dublin, which Whately had founded in 1832. "Archbishop Whately had suggested to him that he should in his lectures from the chair investigate the application of economic doctrine to the special case of Ireland" (Ingram, 1889, p 386), and Hancock had taken up that suggestion. From this, and his existing interest in the compilation of statistics, the idea of establishing a Society "to promote the study of Statistics and Economical Knowledge" seems to have grown.

Most of those who in this "era of enthusiasm" formed or joined statistical societies were motivated by an interest in collecting "statistical facts" and using them to promote social reform. In these respects Hancock and his

associates were no different from any other such group of people, but the *type* of social reform which they wished to promote did differ significantly

In Britain, for example, most of those involved in the statistical movement were concerned about “the state of the poor”, but tended to see the remedies in terms of education and sanitary reform (Cullen, 1975, pp 135–49) In Ireland in 1847 the state of the poor was manifestly disastrous, immediately because of the potato blight, but this was perceived as part of a deeper problem, the failure of the land to provide adequate support for the people So the attention of social reformers tended to focus on changing the system of land tenure

The consequences of this are evident in the early development of the Dublin Statistical Society, compared to those in Manchester and London In their early days these latter societies launched ambitious social surveys, often concerned with the state of education or housing, but found them costly and difficult to organise In an apparent effort to achieve the same sort of objective without running into the same difficulties, some of the members of the Dublin Statistical Society set up in 1850 a branch “Society for Promoting Scientific Inquiries into Social Reform”, usually called the Social Inquiry Society Financed by specially large subscriptions, this Society commissioned the production not of social surveys, but of reports by single authors on specific problems Eight such reports were produced between 1850 and 1855, and all of them were concerned with legal questions – some with problems of land tenure, others with issues like patent laws and partnerships of limited liability This can be seen as an outcome of Hancock’s strongly held view that the “impediments to the prosperity of Ireland” could be found in the defective state of her laws

In 1855 the Social Inquiry Society was merged into the Dublin Statistical Society, which then enlarged its original objectives to include the study of jurisprudence – reflecting the continuing importance of legal problems in its work

A few years later in 1858, the Royal Dublin Society proposed to bring the various scientific societies in Dublin into union with it The Dublin Statistical Society was one of those which accepted the proposal and became formally “in Association with the Royal Dublin Society At first the arrangement proved beneficial, but when in 1862 the Statistical Society sought to expand and modify its organisation the association with the RDS created difficulties So our Society became independent again, under the name which it has ever since borne, the Statistical and Social Inquiry Society of Ireland

For the next twenty five years the Society rode on a high tide of success Its business was now organised (after the model of the National Association for the Promotion of Social Science) into Departments, there were three of these – Jurisprudence and Amendment of the Law, Social Science, including Education and Political Economy, Public Health and Sanitary Reform, and in each a good supply of papers was forthcoming The Society was also able to

revive the old Social Inquiry Society's approach of commissioning paid reports on specific issues, and to continue to administer the series of lectures on political economy throughout Ireland established by a bequest of John Barrington, a Dublin merchant – a task which his trustees had asked the Dublin Statistical Society to take on in 1849 and which the Society has ever since carried out

Just about a century ago the fortunes of the Society began to change for the worse. With forty sessions of active proceedings behind it, it had already lasted longer than most of the statistical societies which had sprung up during "the era of enthusiasm" in the eighteen-thirties and forties, but for a time it seemed as if it would follow the majority of them into oblivion. Efforts of the Council members of the period to increase membership and reduce expenses succeeded in bringing an end to the recession in the Society's affairs by about 1912–14, but for another decade after that its activities continued on a much reduced scale.

It is easy to set out these facts which are well documented in the Society's minutes, but no so easy to explain them. The initial faltering may have been due in some degree to the passing of the founders, many of them had undoubtedly devoted much time and energy to building up the Society, and most were people of exceptional ability. In addition to Hancock and Whately, they included T. A. Larcom, head of the Ordnance Survey and later Under-Secretary for Ireland, Thomas O'Hagan, Attorney General and twice Lord Chancellor of Ireland, Mountfort Longfield, the first Whately Professor and afterwards Judge of the Landed Estates Court, and John Kells Ingram, a recognised scholar in classical and English literature as well as an able mathematician and economist. Men of this calibre were inevitably hard to replace, but the Society was fortunate to have others to follow them like C. F. Bastable, internationally known in the early years of this century for his work in public finance and international trade, T. W. Grimshaw, Registrar General for Ireland and Father T. A. Finlay, philosopher, economist, and founding Vice-President of the Irish Agricultural Organisation Society in 1894.

What the Society lacked seems to have been not so much able officers as the wide public support which it had formerly enjoyed. This may have been due to a variety of factors, but probably the main one was the fact that by the end of the nineteenth century many of the reforms which the Society's founder members had urged had been carried out, or superseded. The land question was no longer central and Hancock's favourite concept, *laissez-faire*, was no longer seen as the basis for a positive programme of reform, but as a negative and discredited doctrine.

Paradoxically, it may have been just these causes of decline which contained within them the seeds of revival for the Society. In her valuable economic and social history of Dublin from 1860 to 1914, Dr. Mary E. Daly has called the city "the deposed capital" but points out that "the Irish administration was centred in Dublin, and despite the Union many functions were carried out there, rather

than in Whitehall. The expansion of government activity, the emergence of new institutions, such as the Local Government Board or the Department of Agriculture, meant a steady rise in the numbers employed in government and administration" (Daly, 1984, p. 4). It was from these numbers that the Society could and did derive new members with new interests, yet well within the scope of its original objectives.

It was not until Dublin really became a capital city once more, with the founding of the Irish Free State, that a pronounced revival of interest in the Society became apparent, membership was almost doubled between 1921 and 1925. The latter year saw the beginning of the informal connection between the Society and the Statistics Branch of the Department of Industry and Commerce, later the Central Statistics Office, which was to become and remain an important source of strength for the Society.

The nineteen-twenties and thirties saw a sustained and successful attempt to restore the finances and enhance the prestige of the Society and its continued growth was not interrupted by the 'emergency' years of World War II. So the Society came to celebrate its centenary in 1947 with a membership little short of the best levels attained in the golden years of the mid-Victorian enthusiasm for statistical studies. In the ensuing forty sessions it has remained healthy and active in the face of unprecedentedly rapid change both in economic and social conditions and in the character of statistical and economic science. The Irish social scientist today – budding or established – has many other meetings of a professional character to attend besides those of the Statistical and Social Inquiry Society and many other journals in which to publish research results. Yet on the other hand there are very many more social scientists and others interested in statistics and economics, and no lack of problems and policies for them to investigate and discuss. The Society today still "remains with its very broad spectrum of interests, the main forum in the country for those concerned – researchers and advisers – with national policy issues which need to draw on the fruits of statistical, economic and social analysis for their satisfactory resolution" (*Handbook SSISI*, 1979, p. 4).

3 THE WORK OF THE SOCIETY IN THE CONTEXT OF IRELAND

Over the past one hundred and forty years, how has the Society gone about achieving its declared objective, "the promotion of the study of statistics, jurisprudence, and social and economic science"? An examination of that question can throw a good deal of light not only on the changing character and status of those subjects, but also on the ways in which the Society and its members have been influenced by, and in turn sought to influence, changing conditions in Ireland in general and in Dublin in particular.

To take the most general of these points first, a review of the proceedings since the first meetings of the Dublin Statistical Society will at once make clear that statistics and economics have always been the predominant interest of the

members, but that interest has always been primarily in the applied side of both of those disciplines. Throughout its existence the Society has heard a number of papers on the theory and methodology of statistics and of other social sciences – some, like J K Ingram's "Present Position and Prospects of Political Economy" (1878), of a quality which attracted world-wide attention (*Journal SSISI*, VII, Appendix). Yet it has normally been the *use*, rather than the development, of theories and methods which has concerned the Society's contributors. Statistics have been used to describe the structure and movement of Irish economy and society and political economy to aid in understanding them. Perhaps because of the example set by Hancock, even in the early days statistics did mean quantitative measurement, not just verbal description, and crude though the measurements might be in some cases, the early papers were for the most part more "statistical" in this sense than many of those submitted to other Statistical Societies of the period.

Over time, though, the rising level of sophistication in the use of quantitative methods in applied work is readily perceptible in the Society's proceedings. Nor is this just because of the obvious, although important, increase over time in the scope and reliability of the data available, in the years since the centenary particularly one can notice how contributors have begun to use the techniques of econometrics to set the data within the framework of economic models, and to undertake forecasting as well as just recording (*cf SSISI Handbook with Indexes*, 1979, pp 32–3 "Economic Models and Planning").

However much social scientists may confine themselves to practical problems, theory does provide a frame of reference within which they tend to think about them. One simple instance of this is the concept of "full employment", which does not appear in the Society's Journals until 1944, even "unemployment" does not appear before 1925, although C H Oldham made a strikingly early contribution under the ponderous title of "Fluctuating Character of Modern Employment" in 1895 (*Journal SSISI*, X, p 128).

To illustrate the same point from another angle, in the early eighteen-sixties a number of members of the Society, including Hancock, Denis Caulfield Heron and Randal MacDonnell, became involved in something of a 'great debate' on "the supposed progressive decline of Irish prosperity". Various measurements were put forward for this – acreage of land under crops, customs and excise returns, bank deposits, but the concept of gross domestic product or national income does not emerge at all at this time. Again, though, it is worthy of note that it made quite an early appearance in the Society's proceedings with Professor George Duncan's 1939 paper on "The Social Income of the Irish Free State" (*Journal SSISI*, XVI, p 1).

So much, in a broad sense, for "statistical and economic studies", but what about jurisprudence? As has been indicated in the previous section, it did play a significant part in the early work of the Society. More than forty papers and reports, not just on issues of land law, but also on the laws of bankruptcy and debt and the organisation of the courts, were submitted before the turn of the

century and even in the nineteen-twenties and thirties occasional papers on legal problems were read. Since its centenary in 1947, however, the Society has heard only one paper which could be considered to come under this head.

Yet whether they thought about removing legal obstacles or about putting new measures on the statute book the Society's members have always been interested first and foremost in the policies and reforms which might improve the economic and social condition of the country. Here too it is interesting to take stock of their changing concerns as evidenced in the work of the Society.

There can be no doubt, and no surprise, about what has been the single most important concern over the whole one hundred and forty years of the Society's existence, it has been the land and agriculture. For the first half-century following the foundation of the Dublin Statistical Society, the land question dominated Irish life both economically and politically. Inevitably, in those years, scarcely a session ever passed without at least one paper, report or address on or related to the land question, and the Society claimed that its deliberations had substantially influenced some of the measures which reached the stage of enactment, notably the Incumbered Estates Act of 1849 and Gladstone's first Land Act of 1870 (*cf. Journal SSISI, 1881, VIII, p. 146, p. 149*).

Great as was the importance attaching to questions of land ownership and tenants' rights in those days, it did not altogether prevent discussion in the Society about problems of land use in agriculture and the returns from it. Towards the end of the nineteenth century the question of improving these through co-operation came to the fore, and the Society numbered some notable figures in the co-operative movement among its members, such as Father Finlay and "AE" (George Russell).

As the land question faded from public notice, so the number of papers concerned with other aspects of agricultural policy and farm economics increased. With increasing quantity and quality of data and growing sophistication of methods, they have continued, and surely will continue, to be a staple part of the Society's work. But if the land of Ireland has always been a primary concern of the Society, so too has its population. From 1849 down to the present time the proceedings have included papers on population theories and demographic trends, but special interest has always attached to the reviews, and sometimes previews, of each Census of Population. Most of these papers have been the work, in the earlier days, of the Registrar-General, in more recent times of the Director of Statistics, illustrating again the long established status of the Society as a forum for such reviews and the importance of its links with official statisticians.

By comparison with agriculture, the number of papers on industry presented even up to 1914 was trifling (six), but more recent years have seen an increase in this area. One might be tempted to conclude that the earlier apparent neglect was an outcome of the faith in *laissez-faire* and free trade.

proposed by Hancock and others, but that would not be altogether correct. In an interesting paper read in 1883, entitled "Free Trade and Irish Manufactures" (*Journal SSISI*, VIII, p. 430), Richard Cherry contended that "a general acceptance of free trade principles is not conclusive even against some form of legislative protection for home industries if such were possible" and supported his case with 'infant industry'-type arguments drawn from Adam Smith and John Stuart Mill. Since before 1922 legislative protection was not possible most other members who dealt with the development of Irish industry before that date tended to stress the value of other measures to increase competitiveness, such as improved training of the work force. In this context a paper of 1876 by Major H. Geary on the "Importance of Industrial Education" (*Journal SSISI*, VII, p. 44) was the first of a number of similar ones urging the importance of developing technical education. A related problem which also formed the subject of many papers was that of trade unions and industrial relations. Most of the early ones were critical of the effect of trade unions on employment and industrial activity: thus in 1860 Thomas M. Busted declared that "trade unions in their object and the means whereby they sought to obtain it have been inoperative, injurious and unnecessary" (*Journal SSISI*, II, p. 464). Nevertheless, there was recognition of the long hours and poor conditions endured by many workers. Neilson Hancock, perhaps the most articulate and determined supporter of *laissez-faire* the Society ever had, contributed a short paper (incidentally one of 89 papers which he read before it!) on "Strikes with respect to Hours of Labour" in 1865. In this he suggested, perhaps somewhat naively, that "the question is primarily a moral and social question and not an economic one: the public should lend their aid in cases beyond the operation of the Factory Acts, strengthening the formation of a strong public opinion in favour of reasonable and moderate hours of labour" (*Journal SSISI*, IV, p. 216).

In view of the present tendency to think of Gladstone's time as the golden era of fiscal rectitude and low taxation, it is somewhat surprising to find that the only other subject besides those already mentioned which could compare with the land question for frequency of discussion in this Society in the nineteenth century was taxation and public finance. The question at issue here, however, was not so much the level of individual taxes, direct or indirect, as the distribution of the total burden of taxation between Great Britain and Ireland under the Union. The Irish contention that in proportion to her taxable capacity Ireland had been over-taxed ever since the Union and did not receive corresponding returns in public expenditure gained support from the majority report, issued in 1896, of a Royal Commission on the subject appointed by Gladstone in 1893. The government of the day did not act on this, but did put through the Irish Local Government Act of 1898 and another in 1899 which set up the Department of Agriculture and Technical Instruction for Ireland – measures incorporating the sort of reforms which had often been advocated in papers presented to this Society.

All of these changes found their reflection in the proceedings of the Society over the period 1895–1905, thereafter attention shifted to other topics, but while public finance has not since had the same prominence, it has continued to generate papers devoted to its different aspects and it seems safe enough to predict that it always will

4 THE WORK OF THE SOCIETY IN THE CONTEXT OF DUBLIN

Comparing the history of this Society with that of, say, the Manchester Statistical Society and others like it, the principal difference which emerges is the preoccupation of those societies in the nineteenth century with the problems of industrialisation and urbanisation as against the preoccupation of our Society with land and agriculture

Nevertheless, the Statistical and Social Inquiry Society of Ireland did begin life as the Dublin Statistical Society and has always continued to meet in Dublin. So one would expect it to have had some concern with urban problems and Dublin problems particularly and that has indeed been the case for over a century

Reform of the sanitary laws was an early interest of the Society. Dr Edward Dillon Mapother, Dublin's Medical Officer of Health, was a member of the Society and indeed its President in 1880–81. He presented his first paper on the "Sanitary State of Dublin" in 1864 (*Journal SSISI*, IV, p. 62) and followed it with two others in 1865 drawing attention to differences in the state of the laws on the subject in Ireland and England and the resultant "Unhealthiness of Irish Towns" (*Journal SSISI*, IV, p. 203, p. 250). His work resulted in the passing of the Sanitary Act 1866 which made the English sanitary laws up to 1855 applicable in Ireland. A considerable improvement resulted in Dublin particularly, but a further paper – by John Norwood in 1873 (*Journal SSISI*, VI, p. 230) – showed that there was still much to be desired.

One of the problems to which Norwood drew attention was the difficulty of acting against the owners of unfit and condemned premises. This was a facet of another problem which frequently came before the Society – the extent of bad housing in Dublin and its consequences. Norwood's own estimate was "that of the 23,895 inhabited houses in the city, there are no fewer than 9,300 houses let in tenements, occupied by an average of eleven souls per house, and of these about 1,000 are owned by three individuals"

This frightful state of affairs had altered in its details, but not in its essentials, in 1914 when S. Shannon Millin read to the Society his paper "Slums: A Sociological Retrospect of the City of Dublin" (*Journal SSISI*, XIII, p. 130) and he was able to show that it could be traced back to the end of the eighteenth century. Anyone who wondered why such conditions had persisted so long had only to wait for the next meeting in March 1914 when D. A. Chart presented a starkly simple paper on "Unskilled Labour in Dublin" (*Journal SSISI*, XIII, p. 160). The city, he showed, had a surplus of such untrained labour, so that the

market rate of wages came down to an average of eighteen shillings per week "The receiver of 18/- a week cannot afford to pay more than 2/6 to 3/- a week for the rent of his dwelling Now the plain fact of the matter is that decent accommodation fit for the inhabitation of a family cannot be commercially supplied for this figure" So the market offered a solution – the supply of unfit housing "What then", asked Chart, "can be done to improve the position of the labourer and to rescue him from the Slough of Despond in which he lies? In the first place an increase of wages, or, at all events a levelling up of wages to the figures now paid only by model employers seems inevitable", and he went on to suggest measures of economic development which could make this possible

Chart was writing just as the labourers were drifting back to work after the finish of the great Dublin strike and lock-out of 1913, the culmination of a long period of growing unrest and increasing organisation among Dublin's unskilled workers But it was Chart who in another paper, "The General Strike as a Labour Weapon", read to the Society in February 1912 (*Journal SSISI*, XII, p 559) had drawn attention to the implications of new forms of organisation and industrial action among unskilled workers

These then are some of the factors of the social and economic life of Dublin, during the last century and a half of its first millennium, and of Ireland too, which have been recorded and discussed in the proceedings of the Statistical Society

What can the Society claim to have done in that time since the Famine, so full of change, of light and darkness, growth and decay? Nothing dramatic, but something continuously useful, in providing a forum where those who measured the changes could report and others discuss them, and where the measures which had been or might be taken towards the solution of social and economic problems could be the subject of well informed debate

In this paper I have tried to use the opportunity which the Dublin Millennium provides for us, to review our Society's work and set it into a longer perspective As Dublin moves into its second millennium and the Society approaches its sesquicentennial such a review ought to prompt thoughts about the Society's future as well as its past, but I shall leave that as a challenge which I hope others will take up in the discussion

FOOTNOTE

- 1 I am indebted to the President, Professor J J Sexton, for drawing my attention to this reference

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DISCUSSION

T P Linehan It is a privilege to be asked to propose the vote of thanks to Dr Black on this occasion and in these historic rooms

In a millennium atmosphere in the shadow of the millennium candle, it is not difficult to imagine the spirits of those who have preceded us paying a curious visit this evening to peek at those who have come after them, to listen, to expect from us explicit recognition of their splendid contributions and evidence that the work and traditions of their Society are being carried on faithfully with due regard to changing circumstances – and circumstances have indeed changed!

Dr Black gave that recognition in a memorable and lasting way in the history of the Society which he prepared for the 1947 centenary celebrations, and it is most appropriate this evening that he should be the person to demonstrate, in this excellent paper, the extraordinarily wide compass of the **Statistical and Social Inquiry Society of Ireland** and the equally wide range of interests of those who have been associated with its work

It might seem rather ungallant of me to differ with him on one factual point but, being very conscious of that other audience, and as the effect is to enhance even more the Society's record, Dr Black will really welcome it I refer to his mention of the early appearance of the national income concept in the Society's proceedings – there was an even earlier paper by Dr T J Kiernan in 1933 under the title "The National Expenditure of the Irish Free State in 1926" [*Journal SSISI* XV p 91]

In that spirited and spirit audience, I salute especially those with whom I share a special link – those who laboured in the fields of official statistics whether as Census Commissioners or Registrars-General in the earliest days or in more recent times (i.e. from 1922) as Directors of Statistics – John Hooper, Stanley Lyon, Roy Geary, Donal McCarthy

Although time limits rule out detailed reference to each of those covered in that long time span may I refer to two, one at the beginning – the other towards the end of the period, without prejudice to the outstanding achievements of the others

The first is Thomas Aiskew Larcom a founder member of the Society He was the key element in the organisation of the Great Census of 1841 and also the originator of the plan for Agricultural statistics from 1847 onwards He was much more of course as shown in Dr Black's biographical sketch in the centenary volume – eventually Sir Thomas Larcom-Permanent Undersecretary to the Lord Lieutenant

Incidentally, in regard to the reference in the paper to the results of the 1831 Census, Larcom said in his address to the Society in June 1850 – "It has always been thought, and apparently with good reason, that the Census of 1821 was too low and that of 1831 too high" [Address at conclusion of the 3rd Session June 1850]

The heritage which he bequeathed to those who were subsequently responsible for the decennial or quinquennial Censuses of Population and the Annual Census of Agriculture was an enumeration system carried out by the Royal Irish Constabulary and, subsequently, by the Garda Síochána – a system which ensured a most organised and disciplined field force on a nationwide scale, part of a permanent administrative structure and – oh envious thought! – no necessity for large voted sums for statistical inquiries. How the old order changeth! Now our Population Census is mounted as a marathon project calling for the recruitment and assembly of a field force of some 3500 temporary field staff and a very substantial addition to funds voted for CSO. Costs are now transparent – to use an equally modern term. As regards the agricultural inquiries we are at the stage of developing sample schemes using postal inquiries.

Sir Thomas Larcom would I am sure welcome enthusiastically the use now being made of modern technology to provide so many and varied Census crossclassifications, not only at national level but as part of the Small Area Statistics on tape, discette, or computer printout.

Dublin of the millennium has one-half a million inhabitants – 14% of the State total but varying from only 10% for young children to over 20% for those in the 20–24 age group, Dublin has some 25% of those returned as separated, it has 59% of persons who live in flats, bedsitters etc. Information on these and other characteristics exists for each of the 162 Wards of “Dublin’s fair city”.

One wonders what type of information Larcom would be aiming at collecting in the 1991 Census?

The same remark is equally relevant for Roy Geary – he also was a Census man and much more besides – no doubt he would have been “Sir Roy” in unchanged circumstances!

To digress for a moment – I can almost hear Roy, on an occasion such as this, referring to the Population Projections just published and reminding us that in a paper to the Society in 1935 he had given forecasts (two versions) up to the year 2016 and with great joy quoting his forecast B for 1986 as 3575 thousand – within one percent of the actual Census count, 3541, taken 51 years later! Characteristically he would be the first to point out that he benefited from the law of large numbers since the age structure of his projection was very different from the actual outcome.

As I said Roy Geary was much more than a Census man – and he was more than a national figure. Reflecting another aspect of change, he was very active on the international statistical scene and involved, for example, with FAO in comparable indexes of agricultural output, with UN Statistical Office re systems of wholesale prices, with OECD in the initial stages of the development of standardised systems of national accounts.

International comparability is now given far greater weight than earlier, and most recently, for EEC Member Countries, there is increasingly a move from

agreement on desirable standards and classifications to be aimed at to prescription of a binding nature

Larcom was operating within a system where Ireland was part of the British Empire, Geary was operating in an independent State, will future Official Statisticians be Regional Officers of a Single European Market? – or, less starkly, will the emphasis on “national statistics” change to statistics for Regions of the Community not necessarily coterminous with national boundaries?

Dr Black in his final paragraph tempts us to think of the Society’s future “He does not need to ask” does it have a future” – it is alive and well. But what can we expect to find on its work programme?

Dr Geary asked in his foreword to the centenary volume – “Should we give more particular direction to our researches or should we leave the subjects and manner of treatment to take care of themselves, as was largely the case in the past?” [*SSIS Centenary Volume 1847–1947* VII]

I suggest that the proceedings should reflect studies on the implications of the Single European market over the Society’s very wide range of interests

1992 looms nearer. There must be many aspects in the social and economic spheres where changes will occur. It would seem that the Society is a most appropriate forum to bring together studies on various aspects – are there some aspects for which it will be impossible to quantify the change in any realistic way unless some studies are carried out on the pre-change position?

1991 is not far off either. It will mark the sesquicentennial of the 1841 Census – I would suggest some elements of the Society’s programme should reflect this

For our 150th celebrations in 1997 perhaps it would be possible to give some international flavour with invited speakers – or more ambitiously – to become the activating agent in organising a meeting in Dublin of some appropriate international group – for example there has recently been formed an International Association for Official Statistics – linked to the International Statistical Institute

Consideration of future changes, set in a historical context, reveals an interesting sequence in one area of statistics. The first paper ever read to the Society was entitled “Statistics and Political Economy” given by James A. Lawson, one of the two Secretaries elected in 1847. Having established to his satisfaction the dependence of one upon the other, Lawson, towards the end of his paper complained – “Yet, even at the present day, how deficient are we in the means of procuring statistical information” – and he mentioned a number of specific problem areas (most, though not all, have since been remedied) the final item being as follows – “since 1825 there is no means of determining the exact amount of trade between this country and Great Britain” [Dec 1847]. That situation arose because of the abolition in 1825 of the system of separate Customs for Ireland and Great Britain

The much heralded abolition from 1992 of internal customs frontiers within EEC invites the image of a paper at the sesquicentennial celebrations in 1997 containing the complaint 'that since 1992 there is no way of determining the exact amount of trade between this country and Great Britain and other member countries of the Community !

In 1997
Will it be statistical Heaven?
Or do the stars foretell
for us stochastic Hell?

Lawson's colleague as Society Secretary was William Nielson Hancock whom we have already met at several points in the paper as the real founder and dynamo of the Society – he continued as Secretary for thirty four years Born in Lisburn, he was Whately Professor of Political Economy in Trinity from 1846 – 1851 and for the two last years of that period he was also Professor of Jurisprudence and Political Economy at Queen's College Belfast This provides another link over time – Dr Black has been actively associated with the Society for most of his life – as Barrington Lecturer, as Secretary for twenty three years, as Vice-President and as President – he has been the Society's staunchest advocate in Belfast where he held the chair of economics at Queen's

It is my great pleasure, on behalf of both the audiences here tonight to propose the formal vote of thanks to Dr Black

Antoin E Murphy It gives me great pleasure to second the vote of thanks to Professor Black for his paper *Measurement Measures and the Millennium* Professor Black has provided a magnificent series of work to Irish economists concerned with examining the evolution and development of economic theories and policies since the eighteenth century His *Catalogue of Pamphlets on Economic Subjects 1750 – 1790 in Irish Libraries* is a book that ranks alongside Einaudi, Goldsmiths, and Kress as an essential work on economic bibliography His *Economic Thought and the Irish Question 1817–70* is an accepted standard work on this period as is his work on Mountifort Longfield and the Irish economists of the nineteenth century

Professor Black's paper is divided into four sections I intend concentrating on section one which deals with statistical ideas before 1847 and will later make some general observations on two nineteenth century issues

Professor Black goes back to Sir William Petty as the originator of "political arithmetic" Petty had an extremely fertile mind which allowed him to pursue careers in differing activities such as anatomy and topography farming in Kerry and writing on economic and statistical issues His *Political Anatomy of Ireland* displays a shrewd understanding of the Irish character Even in those days the Irish were exposed to the criticism of being a lazy race

Petty felt that this so called "lazing" could be explained by reference to (1) the pastoral way of life (2) the religious beliefs of the population and (3) the repressive nature of English legislation on economic activity "Their lazing seems to me to proceed rather from want of employment and encouragement to work than from the natural abundance of phlegm in their bowels and blood, for what need they to work, who can content themselves with potatoes, whereof one cow will, in summer time give meat and drink enough for three men, when they can everywhere gather cockles, oysters, muscles, crabs, etc with boats, nets, angles, or the art of fishing, and can build a house in three days And why should they desire to fare better, though with more labour, when they are taught that this way of living is more like the patriarchs of old, and the saints of later times, by whose prayers and merits they are to be relieved, and whose examples they are therefore to follow? And should they breed more cattle since tis penal to import them into England? Why should they raise more commodities since there are not merchants sufficiently stocked to take them off them, nor provided with more pleasing foreign commodities, to give in exchange for them? And how should merchants have stock, since trade is prohibited and fettered by the statutes of England? And why should men endeavour to get estates, where the legislative power is not agreed upon, and where tricks and words destroy natural rights and property" (*The Political Anatomy of Ireland* in Sir William Petty's *Tracts Chiefly Relating to Ireland* Dublin 1769, pp 366-7)

His comments on the clergy are also worthwhile recalling "I observe that the priests among them are of small learning but they are thought by their flocks to have much because they can speak Latin more or less, and can often out-talk in Latin those who dispute with them

So as they are thereby thought both more orthodox and able than their antagonists Their preaching seems rather bug bearing of their flocks with dreadful stories, than persuading them by reasons, or the scriptures They have an incredible opinion of the Pope and his sanctity, of the happiness of those who can obtain his blessing at the third or fourth hand" (*Ibid* pp 363-4)

Petty had a great influence on Cantillon who was born in the county where Petty lived Unfortunately the only known extant work of Cantillon's is the *Essai sur la Nature du Commerce en General* (1755) However, we know from the Marquis de Mirabeau that this was only one small part of Cantillon's overall writings, the rest of which seem to have been engulfed in a fire in his house in Albemarle Street in 1734 Cantillon was fascinated by statistical evidence as Professor Black's quotation shows In the *Essai* he refers to a statistical supplement which he had compiled to back up the economic theory that he had developed This supplement which was not published, has gone missing though I still hold out hope that it will be discovered in some hitherto uncatalogued manuscripts in a French chateau or archive If this supplement

is found I believe it will enable us to regard Richard Cantillon as one of the founding fathers of economic statistics

That said, Cantillon made an enormous contribution to the development of macroeconomic theory and national income accounting. The main ideas for Quesnay's *Tableau Economique* were first developed by Cantillon. Quesnay reproduced a pictorial representation of Cantillon's theory.

Here I would disagree somewhat with Professor Black's view that it was from the philosophers such as Locke and Hume rather than "calculators" like Petty, that most of the economists of the eighteenth century derived their methodology. A great part of Cantillon's methodology came from Petty, and a great deal of Quesnay's methodology came from Cantillon. Schumpeter in his *History of Economic Analysis* was very laudatory when showing the Petty-Cantillon-Quesnay links. Both Cantillon and Quesnay had a significant influence on Smith. Smith's key distinction between the natural price and the market price of a commodity, in Chapter VII, Book I of the *Wealth of Nations*, has very close parallels with Cantillon's distinction between market price and intrinsic value.

While Cantillon wrote his *Essai* outside Ireland there was a group of writers within the country including Swift, Berkeley, Bindon, Prior, and Madden, who produced a variety of policy recommendations aimed at redressing some of Ireland's economic ills. I concur with Professor Black that one cannot contend, as Professor Rashid has recently written, that this constituted a complete Irish school of economic development. However, it is pleasant to find that one of the concrete results arising from Prior's energy, the Dublin Society, later to become the Royal Dublin Society, was extensively praised in the French pre-Physiocratic literature as the model which French agricultural societies should follow. Indeed a translation of *The Dublin Society's Weekly Observations* (Dublin 1739) was published in Paris in 1759 as the *Essais de la Societe de Dublin* at the instigation of the *Societe d'Agriculture, de Commerce & des Arts* of Brittany. The translator, Thebault, a doctor of medicine and professor of the school of mathematics at Rennes, waxed eloquent in his praise of the activities of the Dublin Society contending that it was a model for the French to follow.

On page 39 of this work there is one of the first printed references to Cantillon's *Essai*, which Thebault in a footnote entry classifies as an "excellent" work.

Cantillon, as stated above, had a great influence on the Physiocrats. A lesser known contribution was that of the Irish agronomist, Henry Patullo, author of *Essai sur l'Amelioration des Terres* (Paris, 1758). Patullo has been included by Jacqueline Hecht in the group which had a formative influence on the early development of Physiocracy (J. Hecht, *Francois Quesnay*, INED 1958, Vol. I, p. 256).

In the second part of his paper Professor Black mentions the appalling state of poverty in Ireland in the nineteenth century. In this respect I would like to raise

two contemporary issues which affected Ireland at the time (1) transportation and (2) the Famine. With respect to the former it is interesting to read what the first President of the Society, Archbishop Whately, had to say about transportation to Australia. Whately opposed transportation. His opposition was not based on humanitarian grounds but due to a belief on his part that transportation was actively sought after by the convict class "we shall presently proceed to show that it is at least highly probable, that actual transportation is, to most offenders, either a very slight punishment, or a reward" (Richard Whately, *Thoughts on Secondary Punishments*, London 1832, p. 67). Later he went on to add "As a matter of prudence it would be advisable to many thousand persons in Ireland and the South of England to commit a crime which would ensure them seven years' transportation to New South Wales" (Ibid. p. 123).

A reading of Robert Hughes's *The Fatal Shore* (1988) shows that many of those transported to Australia would have disagreed with the Archbishop as they ended up in the nineteenth century equivalent of concentration camps in infamous locations such as Norfolk Island.

There is a problem here for us as economists. To what extent did the economic writers of the time identify with the hardships of the vast mass of the population? I find it surprising, for example, that there was practically no mention of the the Famine in the examination papers for the professorship of political economy in Trinity in 1846. This examination, which took place over two days, contained thirty eight questions. The only question alluding to the Famine that was threatening the country at the time was the final one, question 15, on the second day's paper.

"Would it be practicable for Government to adopt any measures which should have the effect of rendering bread corn the staple food of the labouring classes in Ireland, and of averting the periodical visitations of famine and pestilence to which a potato-fed population is exposed?"

While we do not know the way this question was answered we do know from Professor Black's work that the official view as to how to solve the Famine problem was deduced from free trade principles. "We must pay the true value for each article of food and encourage its importation upon that principle. Any other line of conduct would expose us to the most fatal results" (*Economic Thought and the Irish Question 1817-70*, Cambridge, 1960, p. 117). Such a line certainly did not help Irish people faced with the deepening problem of the Famine in 1846.

I am privileged to second the vote of thanks to Professor Black for his paper.

Reply by R D C Black I am glad to have this opportunity to express my gratitude to Mr. Linehan and Dr. Murphy for their valuable comments, and indeed to all the members and guests present for their vote of thanks.

I must first apologise for having overlooked the reference to T J. Kiernan's 1933 paper on National Expenditure to which Mr. Linehan rightly draws

attention. I am glad to be corrected on this, because it reinforces my point that members of our Society were early both in the use of national income concepts and in attempts to measure them. I am glad also that Mr. Linehan, without detracting from the achievements of others, chose to underline the contributions of T. A. Larcom and Roy Geary – both Census men and much else besides. By coincidence, it was Roy Geary who first aroused my interest in the work of Larcom. I well remember standing in Geary's office in the old Statistics Branch in Dublin Castle in 1946, fascinated as he took me through some of the work-books which Larcom had used for the Census of 1841. The more I afterwards learned of Larcom the more impressed I became with the combination of industry and vision which he displayed. The Larcom Papers presented by him to this Society and later given by the Society to the National Library of Ireland, constitute a vast storehouse of information on the Ireland of his time, which historians are still far from having exhausted.

Turning to Dr. Murphy's remarks, I am very glad that he could be here to supplement my necessarily brief treatment of the history of political economy and statistics in the eighteenth century. Perhaps in saying that "most of the economists of the eighteenth century derived their methodology" from philosophers like Locke and Hume rather than calculators like Petty, I may have fallen into the sin of insularity, neglecting the significance of Cantillon as a bridge to continental authors like Quesnay. On nineteenth century issues, Dr. Murphy certainly raises some highly interesting questions, but a reply which would do full justice to them would approach the length of another paper. So let me just make these few points. I think that most nineteenth century economists were sympathetic towards the hardships of the vast mass of the population, but they often did not put their ideas in a form which made that apparent. Carlyle's description of political economy as "the dismal science" did not stick to the subject without good reason. Again, most economists tended to qualify their support for the "general rule of laissez-faire" with many exceptions, but when it came to policy making, politicians tended to remember the general rule and forget the exceptions. It certainly was a calamity for Ireland that in 1846 there came into office a ministry – Lord John Russell's – which was as dogmatically convinced of the efficacy of "market forces" to solve all economic problems as ever the governments of Mrs. Thatcher and Mr. Reagan have been in our day. But it is also worth remembering that Archbishop Whately as Chairman of the Irish Poor Inquiry Commissioners in 1836 had recommended a programme of economic development for Ireland which, had it been carried out, would have made the people far more able to withstand the disaster of the potato blight. It is worth recalling too that the foundation of our Society in the dark days of November, 1847, was to a considerable extent the outcome of William Neilson Hancock's desire "to reconcile the tenets of the economist with the needs of the country."