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## DISEASE, DISABILITY, DEATH

by Arthur Pedoe

The missing word in the title is "dirt" and the connection between dirt, disease, disability, and death is as close as the alliteration.

The title has an important bearing on current conditions where a generation is growing up with a love for dirt, *coprophilia* is the word: clothes worn deliberately ragged and dirty; filthy, long, unwashed hair—forgetting the dangers of typhus which ravaged mankind, associated with the louse. Then there are rock festivals and gatherings of thousands in tent cities with the most primitive and inadequate sanitary services, ignoring mankind's unfortunate experience over thousands of years in the fight against disease. The word dirt comes from the Saxon *drit*, meaning excrement.

The Greeks worshipped health and their aesthetic sense helped them to avoid the worst effects of dirt in human life. The Romans had the practical sense to build baths and aqueducts, but even these did not spare them from the terrible plagues which repeatedly decimated mankind. The plague of Justinian began in Egypt in A.D. 542 and spread over the whole Roman world (in Constantinople it carried off 10,000 in one day). With the decline of Rome, cleanliness declined all over Europe and it was some 13 centuries before western man took steps to make life reasonably healthy.

To illustrate some aspects of medieval life, we mention the murder of Thomas à Becket, Archbishop of Canterbury, in 1170. In preparing the body for burial it was found he was dressed in eight layers of clothes, decaying and verminous. As the body grew cold an observer recorded that the vermin boiled over like water in a simmering cauldron." Disease and the suffering it caused were

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## EUROPEAN REGULATION OF PENSION PLANS

(A report prepared by Frank M. Kleiler for the United States Department of Labor)

by John K. Dyer, Jr.

The further one delves into the social security laws and private occupational pension structures of other countries, the greater becomes his amazement at their intricacy and diversity. The almost unlimited variety of benefit structures, qualifying conditions, and financing mechanisms that can be devised to meet what is essentially a uniform objective—the provision of financial security for large groups of people—must be a tribute to the collective imagination and genius of the social planners, the politicians, and, of course, the actuaries.

Frank M. Kleiler's years of experience as Director of the Office of Labor Management and Welfare Pension Reports prepared him well for surveying public and private benefit systems in other countries. His first such survey, *Canadian Regulation of Pension Plans* (see *The Actuary*, September 1970), was, in the words of the reviewer, "the best, concise, up-to-date one-volume description of public and private pension plans in Canada that exists." This is high praise equally applicable to Mr. Kleiler's latest work, in the opinion of this reviewer.

In some respects the two reports are quite different. The Canadian report covered 97 pages of text, and was documented with 40 pages of appendices. The European report has 22 pages of introductory and summary material, 62 pages of description covering separately ten different countries, and 10 pages of conclusions and bibliography.

Obviously in an average of six pages per country (the range is 4 to 8), the

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## A DESCENT INTO THE MAELSTROM OF THE INSURANCE FUTURE

*Editor's Note: At the recent (June) meeting of the Canadian Institute of Actuaries, George R. Dinney presided over a workshop on The Future of Life Insurance. Mr. Dinney has kindly supplied us with a copy of his text for the workshop.*

There is nothing new under the sun and in many ways we are returning to our origins. Hopefully this backward journey will not carry us to a point of time prior to our origins.

### Future Thinking

In most established industries there is a tendency to adopt what may be termed Maginot Line thinking, i.e., to retreat under heavy fire from one entrenched position to a well fortified but equally undefensible, secondary position. Galbraith's *The New Industrial State* makes sobering comment on the mortality rates of companies and industries that are out of step with time.

We offer a vademecum of famous last words, or a short course in Maginot Line thinking. Complete the following expression:

\_\_\_\_\_ is a threat to the very foundations of our industry which has grown and will continue to grow only on the basis of fixed dollar, permanent, life insurance.

Suggestions for completing this sentence include:

- (a) Group Insurance
- (b) Term Insurance
- (c) Variable Annuities, Mutual Funds
- (d) Variable Insurance
- (e) ?

Fill in the blank with words of your

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# the Editor

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visedly). Thus, a new student is not faced, as formerly, with the decision whether to spend a whole year studying for one three-hour exam or risk failure on two.

Another reason given at the time that preliminary exams were first offered in the Fall was to ease the plight of undergraduates who, presumably, could better afford outside studies in September and October than in March and April. Since few undergraduates have any preparation for Part 4, it was not offered.

Finally, I do not have a great deal of sympathy with those who fail this particular exam. Every other subject covered by the exams is also within the realm of some other profession or discipline. Life contingencies, it seems to me, is the one subject that sets the actuary apart. I have no desire to ease the requirements as to Part 4 by allowing marginal candidates to accumulate short-term knowledge sufficient to pass an exam when knowledge of this subject should be the basis for all sound actuarial work.

Richard S. Hester, Sr.

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## Ulpian's Table

Sir:

The article "Ulpian's Table" by Walter J. Mays in the June issue has, I think, built a top heavy superstructure of Makehamization on shifting sands. The following statements were justified by the writer in a letter he sent to the Joint Editors of the *Journal of the Institute of Actuaries Students' Society*, which was published in Volume 13 (1954) of that journal:

(1) There is as good reason to think that Ulpian's multipliers are annuity values as that they are complete (?) life expectancies.

(2) It is very unlikely that any mortality data were used to produce the figures.

(3) Even if crude mortality data were available it would have been beyond the competence of Roman mathematicians to produce expectancies or annuity values therefrom.

Hilary L. Seal

## Wisdom of Solomon

Sir:

Did the first actuary have 1,000 wives and concubines?

Although King Solomon has been called the wisest and richest man in the world, his talents as an actuary have not been explicitly recognized. Solomon's Law of Mortality is found in *Ecclesiastes* 9:11-12:

"I returned and saw under the sun, that the race is not to the swift, nor the battle to the strong, neither yet bread to the wise, nor yet riches to men of understanding, nor yet favour to men of skill; *but time and chance happeneth of them all.*"

"For man also knoweth not his time: as the fishes that are taken in an evil net, and as the birds that are caught in the snare; so are the sons of man snared in an evil time, when it falleth suddenly upon them."

Solomon expressed mortality as a function of "time and chance" almost 3,000 years before Gompertz and Makeham stated that "... death may be the consequences of two generally coexisting causes: the one, chance, without previous disposition to death or deterioration; the other, a deterioration, or increased inability to withstand destruction." (cf. Jordan, *Life Contingencies*, p. 25).

Actuarial exams might have inspired Solomon's observation "... of making many books there is no end; and much study is a weariness of the flesh." (*Ecc.* 12:12).

David M. Holland

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## Erratum

Sir:

I am insulted! The September issue of *The Actuary* included an "Erratum" note from the printer, apologizing for the transposition of some italics. What kind of an image do actuaries have anyway! Are we regarded by the world at large as a bunch of nit-picking little old ladies? If so, we've sure laid an egg in the image department; that's a louse-y image to have.

James A. Loffree

Editor's Note: Block that metaphor!

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## European Pensions

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pension picture of any one country could not be made nearly as complete as that drawn for Canada. For each of the ten countries, however, the author has correctly and concisely identified the important characteristics of the pension structure, and has composed a remarkably complete "profile" of the whole system. That this was accomplished mainly on the basis of visits to the ten countries covering a period totalling less than two months is a remarkable achievement.

The seven introductory chapters can be summarized by listing their titles: *Introduction, Private Pensions and Social Security, Benefit Levels and Coverage, Tax Treatment of Contributions and Benefits, Vesting and Portability, Funding, Investment Restrictions.* Under each heading the similarities and differences found in the various European countries are correlated and briefly described. These are useful chapters, and with careful reading will establish an excellent background for understanding the many ramifications of pensions in Europe. A casual reading will almost certainly lead to nothing but confusion and frustration.

Since the basic objective of the report is to describe government regulation of pensions, it seems pertinent here to underline one European characteristic which he seems to have overlooked as an item of significance. Insurance regulation in Europe is invariably at the national level, in contrast with the United States where there are 51 different regulatory jurisdictions and only a handful of these have authority over pensions. Thus when insurance regulation is extended to private pensions in Europe the process is relatively simple, and involves simply the extension of existing regulatory facilities.

The countries dealt with in detail in Mr. Kleiler's Chapters 8 to 17 are: the United Kingdom, Sweden, Finland, Norway, Denmark, West Germany, Netherlands, Belgium, France, and Switzerland. In chapter 18 he touches very briefly upon the remaining five countries outside the Iron Curtain: Italy, Spain, Luxembourg, Austria, Portugal, and the Republic of Ireland.

All of the ten countries covered in detail have well-developed social security systems, and also have co-existing

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## European Pensions

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private occupational pension plans of equal importance. As the author points out in his chapter on *Private Pensions and Social Security*, it is often difficult to make a clear distinction between the two categories. In Sweden, France, and the Netherlands, for example, multi-employer negotiated pension systems have been made compulsory by law or regulation for large segments of the working population, although they are privately administered and financed. In Finland, all employers are required to maintain privately financed pension plans meeting statutory minimum standards. In the United Kingdom, employers may "contract out" of a part of social security by substituting a privately financed plan meeting prescribed standards. Where the dividing line between public and private pensions falls in such cases is a matter of definition, and the definition varies from country to country.

Recognizing these difficulties of distinguishing public and private pension systems, Mr. Kleiler has undertaken to provide, in each of his "country" chapters, a concise summary of the whole interrelated structure of public and private pensions, as a background against which the regulatory aspects are discussed. He has done remarkably well, considering the complexity of many of these structures. If any fault can be found, it would be that the emphasis tends to shift from chapter to chapter. Thus, for The Netherlands, where regulation of pensions is strict and detailed, the description of social security is pushed into the background and shortened to the extent that it is easily missed. But for Germany, where pension regulation is minimal, the details of social security and its history, and the philosophy and funding of private pensions, are given more space than is really required.

In the international pension field, changes develop suddenly, rarely being preceded by a long period of legislative maneuvering as in the United States. Thus a report researched in early 1970 and published in early 1971 may become partly obsolete even before its appearance. For example:

- In the United Kingdom, the Labour Party proposals for a major overhauling of social security are all but forgotten, and by the time this review appears, a "White Paper" setting forth the very

## Social Security Notes

1971 *Annual Reports of the Board of Trustees of the Social Security (OASDHI) Trust Funds*, House Documents No. 92-88, 92-89, and 92-87, dated April 19, 1971.

Report No. 92-88 pertains to the old-age, survivors, and disability program, No. 92-89 to the supplemental medical insurance program (Part B of Medicare), and No. 92-87 to the hospital insurance program (Part A of Medicare). Each report includes a comprehensive summary of operations during fiscal 1969-70, short or medium range projections, and long-range actuarial estimates. The projections and the cost estimates relate to the Social Security Act as amended through March 17, 1971. The reports also include statements on the method of financing used by the program under discussion as well as descriptions of the assumptions and methodology used in connection with the projections and the cost estimates.

(Free copies may be obtained from the Chief Actuary, Social Security Administration, Washington, D. C. 20201.)

different ideas of the present Conservative government will probably have been published.

- In Sweden, the employers' association have just negotiated an agreement, to be effective in 1973, to establish a supplemental pension plan for workers similar to that negotiated with salaried employees in 1960.

- In Belgium, a number of the important restraints on the use of insurance contracts for pension purposes have been relaxed, and it appears that the ASBL's, the funding media for most uninsured plans, will finally be subjected to stricter government regulation.

The opening paragraphs of Mr. Kleiler's report ask the questions which provoked the survey: Should the United States enact laws requiring that private pension plans must contain vesting provisions, be funded on some systematic basis, and be supervised as to their investments? Should there be a central government agency to record pension credits? Should there be a government "reinsurance" arrangement to protect employees against plan termination?

In his final chapter he looks back to see if he has found the answers. He found all of the provisions that have been proposed for the United States in some of the European countries, and

some of the proposed provisions in nearly all countries. He found no U.S. type disclosure laws, nor any "non-discrimination" requirements similar to ours. The only characteristics he found common to nearly all European countries are that the tax laws almost always seem to provide incentives for private pensions, and that the trend is towards more rather than less regulation of occupational pensions.

Socio-economic conditions in most countries are so different from those in the United States that it was evidently difficult to visualize their pension laws and regulations working in the United States, or ours being adaptable elsewhere. It may be inferred that he found in Europe no solid evidence indicating that their regulatory laws or principles could, or should, be adopted by the United States.

The list of references in the 4-page bibliography leaves something to be desired. It does not include what is probably the most useful of all United States government publications in the international benefits field — *Social Security Programs Throughout the World*, published by the H.E.W. The list includes a mention of the *Transactions* of the 17th International Congress of Actuaries (London & Edinburgh, 1964), but fails to mention the 18th Congress (Munich, 1968). Both Congresses, and some of the earlier ones, contain many useful papers for the student of international employee benefits. An important omission in the United Kingdom section is G. D. Hosking's recently revised classic, *Pension Schemes and Retirement Benefits*.

The criticisms offered in the foregoing will be recognized as the "nit picking" in which a reviewer is supposed to indulge. The important fact is that Mr. Kleiler has packed into fewer than 100 pages more solid factual information on European pensions than this reviewer would have thought possible, and has done this without loss of clarity or accuracy. The report should be required reading for anyone who wants to familiarize himself, either for the first time or as a "refresher course," with pensions in Europe.

*Editor's Note: A copy of this report may be obtained without charge, as long as a limited supply lasts, by writing to the Labor Management Services Administration, Department of Labor, Washington, D. C. 20210.* □