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by E. J. Moorhead

This newsletter's nominee for the most spectacular American at last summer's International Congress is Prof. William S. Jewell of the University of California, Berkeley, who, as Mr. Hazelcorn reports in this issue, introduced the Congress subject, *Generalized Models of the Insurance Business*. Prof. Jewell describes himself as "a physicist-engineer-operations researcher who has not had extensive actuarial practice," but who, inter alia, teaches life contingencies to engineering and statistics students.

Following a pattern of ideas put forward by his colleague, Prof. Thomas S. Kuhn, in *The Structure of Scientific Revolutions* (a 1970 paperback available in libraries), Prof. Jewell delivered pointed criticism of actuaries who stick to outmoded ways of thinking when conditions demand new approaches. He introduced his paper thus:

Every scientific community reveals its shared beliefs and values . . . and its current state-of-the-art and evolutionary future, through its model-building activity and its scientific communications. To survey the field of actuarial science, one must examine, classify and comment upon the basic paradigms—the accepted concepts-models-puzzles-solutions—that are revealed in the literature of risk and insurance theory.

Examine, classify and comment, Prof. Jewell, in an exciting 45-minute speech, assuredly did. He began by saying that in any scientific community the accepted mode of thought and description is hard to displace, even when some new element such as hyper-inflation or changed living habits begins to contradict the assumptions we have embraced. Says Prof. Jewell:

At first, the reaction to these crises is simply increased activity within the old paradigm, as attempts are made . . . to patch up those methods and models which worked so well in the past. . . . But at some point, the difficulty will not be able to be set right by the traditional processes. . . . Many divergent partial solutions will be attempted. . . . Corporate management, regulators and legislators will also try to resolve matters directly through

their powers, rather than waiting for the community to resolve the anomaly. . . . Then finally occurs what Kuhn calls a scientific revolution—appearance of a competing paradigm which begins to accumulate a weight of evidence and coherence and to attract an increasing number of disciples and camp-followers. . . . Some practitioners are forever resistant, because lifelong productive careers and reputations commit them to an older tradition . . . And often, the arguments which are most convincing in favor of the new paradigm are not easily explained in the old terminology.

No more than the thrust can be conveyed here of a remarkable lecture in which, by the way, the speaker asserts that (a) there's a mismatch between capabilities of today's students and the demands placed upon them by our profession's traditional expected-value models, and (b) the actuary is burdened with an archaic notation system "which is the subject of continued, rather pointless, discussion." The Society would do well to make Prof. Jewell's 98-page paper available to all members willing to study it, and to have it explained and discussed at our 1981 spring meetings.

Among the ringing words with which the paper closes are these:

Receptiveness to new ideas is critical. . . , and it is delightful to see that it is often the senior statesmen of insurance who are actively trying out and promoting new ideas. . . . More research support is needed. . . . I hope to see ARCH grow into a national research journal encouraging contributions from other scientists interested in insurance modeling. . . . There must be continuing evolution of the educational process. . . .

I urge you all to continue to be receptive of and tolerant towards new methods, models, and paradigms, analyzing and testing them, not through reaction, but in terms of their potential utility to the actuarial community and the insurance enterprise. . . . The evolution of the '80's will, I believe, make it an exciting and challenging decade for insurance modelling, and I look forward to participating in it with you. (emphasis added) □

FOR THE INFLATION SICKNESS

by E. J. Moorhead

"Differential Inflation," says Elmer R. Benedict, "denotes the distortion of income relationships among members of the population resulting from the combination of price inflation and 'wage' or, more generally, 'income' inflation."

Mr. Benedict has devoted several years of his retirement to studying the scourge of inflation, and has written a yet unpublished manuscript that sets forth a plan for relieving the unfair impact that price inflation exerts upon those who aren't fully or substantially protected by the offsetting income inflation.

His underlying theme is that the best national hope for bringing our dollar's value back to reasonable stability would come from making sure that everybody, not just the retired, shares in the losses that inflation causes. He emphasizes, appropriately enough, that the price rises that everybody complains about are a genuine disaster for but a minority, a nuisance for many others, and even a source of personal advantage for some. While this anomaly continues, it is useless to hope that an aroused electorate will demand that the federal authorities take remedial action.

Mr. Benedict's book, *Protecting Retirement Against Inflation*, presents a broad program for equitable sharing of the inflation burden. Its kingpin is an income adjustment designed to restore the purchasing power of the otherwise ravaged incomes of retired and disabled persons and surviving widow(er)s.

The plan calls for use of the federal income tax system as a redistributing mechanism. The taxpayer would declare, in Form 1040, the loss he or she had suffered from the rise in the cost of living, treating it just as if it were a tax that he or she had already paid. That same amount would be declared as income for the year. Thus the Benedict adjustment would work just as if the government had mailed the taxpayer a check for his or her cost-of-living reparation, its amount constituting both taxable income and tax already paid. The size of this inflation protection would be identical to that now provided to civil service and armed forces pensioners (Titles 5 and 10 of the U.S. Code).

(Continued on page 5)