How Our Days Became Numbered: Risk and the Rise of the Statistical Individual
Dan Bouk

The first chapter the introduction says the purpose of the book is to explore the fundamental transaction from 19th-century dreams of reading fate to 20th-century efforts to master fate, from foretelling death to grasping open paren and controlling) life. This transaction this transition mattered to insurance, but also to doctors, corporate managers, bureaucrats and legislatures, and shape the lives of ordinary Americans… The author says he learned about the "peculiarly powerful way that American capitalism translates people into numbers."

My note – this reminds me of the book, was a by Nigel mile Ferguson, on risk? The origins of the insurance business, and spreading risk in modern capitalism.

The author says that as early as the Civil War Americans have learned to encounter statistics in their daily lives.

This is interesting because the science of statistics did not get started until the end of the 19th century, pretty much with Fisher and Pearson.

So this says that the data preceded the formal tools from the manipulating data. They built tables of actuarial tables, without the tools to express the what they found statistically.

There was, of course, always the census. The census was a wealth of numbers.

Americans resist being made statistical. Intelligence testing not only revealed information about people, but change people's perceptions of themselves and change the lives.

The place was this more evident than in the life insurance business, which progressed from predicting mortality to preventing mortality. These actuaries got into people's lives. And that is going to be focused focus of the book it appears. Commoditizing risk. This is in the 19th century, not only work goods commodities, risk became a tradable commodity.

The life insurance companies became very rich and powerful. There money that they had at their control under their control and trusts brought considerable influence. There were some scandals about the large amounts of money that the executives had the large amounts they deployed. They've course, had considerable influence in government.

The author puts up some flags. He mentions Foucault and he seems to have a special focus on ensuring African-Americans.

The author says that he questions putting so much power in corporate hands. Reducing is all too statistical abstractions gives the corporations a lot of power over our lives. Will they hire us? Were they insurers? Without insurance can we buy a house? Will they make a loan?

Chapter 1. Classing.

Classing is the process of classifying individuals according to their risk profile and pricing product according to the risk.

The term used is to "individualize life insurance." Every individual is a member of the pool, assigned to risk class, but they tried to individualize those classes as much as possible. Through the use of statistical and actuarial techniques.

Life insurance boomed after the Civil War. The authors words, Americans whose wealth came from their hands or heads rather from land and property new to protect their families in the event of their death.

The centerpiece of the chapter trial of a Mr. Lambert, whose two used Biomet tree CIO in CTR why, the measure of the individual body, as a means of judging the constitution of the person and hence their insurability.

It is also on this chapter an illustration of a mortality table, life expectancy at different ages, so insurance could be priced according to the age of the insured.

Lambert looked at the ethnic background, the lap lenders Eskimos and citizens of Zürich were notably short lived, while Jews Welsh Scots Italian New Englanders quite long.

Each individual's family history mattered even more.

The Lambert would've liked to get family histories from people, but in most cases they were unavailable, people didn't know and they might be reluctant to say. So he used his bodily measurements.

Moron classing. Whereas Lambert and the rest of life insurance company attempted to class up front, equitable, others such as mutual to your to dividends, representing an after-the-fact, post hoc actuarial analysis. As it serves us soon American press of American popular life was Lambert's company

Who should control classing? Doctors or actuaries?

All classing is essentially providing for the different groups, post data mystically is on. Smoothing is statistical aggregation of risk, smoothing over a population of similarly physician should people.

Insurance regulators needed to determine whether companies had adequate reserves. In doing this they used actuarial tables. The fact that the choose the control of New York's actuarial tables was controversial to say the least. It was a question of New York establishing national standard.

Another key was injured interest rate assumptions. The solvency of the company depended on its return on investment. There were debates in the 1870s between 7% return at 4.5% return. This was between American popular life and was New York. Leveraged over a lifetime, very significant differences and there is always in differences in pricing and risk.

Chapter 2 utilizing

The topic of the title and the title of the chapter is penalizing. Use the sentence a growing portion of the American population came into contact with life insurers for utilizing – the insistence that path statistics guide their prognostications the future lifespans and that company experience be used to set life insurance premiums. Life insurers played a central role in bringing the fundamental premise of statistical probability to the American public, only to discover that many people did not like seeing a powerful corporation yielding stern, fatalistic laws.

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Enter the industrial life insurers, later in the 19th century, who ensured the working man, not the middle class. Their agents came biweekly to pick up small premiums. It originally started as burial insurance.

This chapter focuses on African-Americans, who fought life insurers over the relevance of history to their racist future.

The question was whether or not actuarial experience in the days of slavery was relevant after the end of slavery, during reconstruction.

In 1880 mutual of New York decided not to continue ensuring Blacks. They simply did not have the actuarial experience, and that which they had say interpreted negatively.

Box were insured, paying the same five cents a week, receiving only two thirds as much in benefits. The company's attitude was take it or leave it, because there statistical tables showed more actuarial risk with Blacks.

Among the white insured, tell the in the Atlantic coast south exceeded the North by 15 to 20%, while the Gulf states showed nearly 70% higher mortality rates

Poor operative life insurance did not need stabilizing techniques. Because they were all in it together.

Therefore, in the late 19th century when policyholders could not ensure with the big corporate companies, they could always go to cooperatives. There were alternatives.

In 1884 Massachusetts law barred discrimination on the basis of race in selling life insurance. It's remarkably early.

It was appearing victory – the company stopped writing policies for Blacks.

Hoffman, a German immigrant, wrote a book on "lease traits and tendencies in the American Negro". His thesis was that free black race was going to go extinct and that it could not compete with whites. Measured brain weights and physical capacities and judge them to be inferior

In the 1880s, Blacks were routinely denied insurance. The exception was Metropolitan Life, which actively sold policies to Blacks, but only after rigorous medical examinations.

This forced the black community to establish their own life insurance companies. They did this, and in doing so were a major source of capital accumulation within the black community.

There was also an equality argument for women. Until that time women had been charged more than men. The suffragettes challenge that, demanding equal rates.

Chapter 3 writing

This chapter describes the mechanics of processing insurance applications. The insurance business was a massive paperwork effort. It depended on files, card files, pneumatic tubes, and thousands of people reading and processing paper.

We are now into the early 20th century.

The question goes on – can life insurers use the statistical past to predict individual futures – that question remains unanswered.

This chapter is based on 1909 pamphlet on the processing of a single application.

May insurers were the first to correlate statistically medical observations with incidents of death. In this particular case the correlation between food in the ears and tuberculosis. It was a correlation which others had not seen.

Once again, one remarks that this was done without any sort of computational machinery, and without statistical methodologies. Simply by observation.

Note that the Burroughs calculator was invented in the 1890s. There was could study progress, with IBM edits punched cards coming in the 19 teens and 20s.

Holler with started the punched card for the census of 1890.

In the 1880s they started to get incontestability clauses. Any life insurance it had been in effect for a certain number of years was incontestable, even if the life insurer suspected suicidal tendencies or pre-existing conditions at the time the policy was issued. This made it more important for them to screen their applicants beforehand.

He introduces Charles B Holmes, who appeared in 1889, to play a crucial role in bringing the

techniques of credit reporting to the problem of predicting and preventing fraud in insurance.

Holmes offered to send a full credit report on any individual in the United States by mail for only one dollar.

Particularly important was cross correlating credit history and life insurance.

They also tracked credit rejections and life insurance rejections, looking for patterns

Then use armies of informants – 16,000 is a figure given – to report on health and credit of policyholders and applicants.

Mass production, and statistics enabled them to observe the results of doctors and lawyers that the employee, and impose some standardized ways of doing business. They harnessed these independent professionals, to ensure that they were all pretty much in line.

Discipline" does not equate to punish" in this case. Following Foucault's distinction, it means something closer to "teach" or "train".

Interesting again to choose Foucault as an expert, and a book that sites very few others.

They needed to teach doctors to think in terms of average health, not individual conditions. To look at the overall person and reduce them to cross population standards.

They introduced standard questionnaires, and family history history questionnaires, and standard height and weight measurements.

Standardized urine samples.

Insurers credit reporters and other corporations you professionals – whether they resisted or not – to systematically observe and record American society. They enlisted professionals to help make risks. I add my own words this was doctors in credit reporters.

They used paper card files. Card stock, one assumes rather like library card files of the 1950s.

They started the insurance company started to use centralized files, in one example the so-called rejection exchange, where they created a common list of rejected applicants.

This leads to some obvious questions about sorting and duplicate names and so on. But it was certainly a step forward

The card systems required standard codes. A shorthand that would save space and lead to the comparability of different records.

Question of accepting or rejecting applicants became more sophisticated – they would issue "substandard" insurance, with higher premiums, for applicants with only slightly elevated risk.

What are the incentives? The corporate directors managed large pools of money, the invested assets. Maybe were often more interested in growing the asset pool than they were in the quality of the insured. They wanted their money.

There was therefore a conflict between the finance committee, deciding what to do with the money, and the correspondent networks, which brought in business.

There was the medical information Bureau, an outgrowth of the rejections exchange, which operated in secrecy. The companies were even forbidden for from mentioning its existence. They shared a lot of information on not only rejections but also substandard policies that they had written, impairments and other data. All this with manual cards!

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By 1905 the insurers had switched into statistical measures. Instead of drawing actual curves of loss experience, they used curves derived from formulas.

Need to explain the term "risk making". It is fully my call risk setting, or statistically projecting the risks of a certain policy.

Actuaries decisions freed up capital for payment of corporate dividends to the shareholders.

Chapter 5. The modern modern conception of death

Should Provident savings life started to offer free preventative checkups to all policyholders.

Death had been mysterious, but the actuaries had made its regularities evident. Now the question was whether it could be controlled by looking at health.

1907 Brandon drifts Simons lead by example in taking life insurers into preserving health. He the insurers had compared height and weight, looking for underweight individuals as susceptible to tuberculosis. What they found was that overweight was a greater health risk than underweight.

Correlation is not causation. They can correlated, but they didn't prove it.

Bring up Carl Pearson in 1905 in uninteresting connection. They don't talk about his work in England.

Curious that the author does not tell us who Carl Pearson is.

Irving Fisher also had a very large career, with some statistics.

Fisher pointed to fire and employers liability insurers, who already incorporated prevention in their programs. Why should life insurers act differently?

When the private companies attempted to work with public health, they were criticized for misdirecting corporate resources – shareholder money.

Fisher's work in World War I prior to World War I and the draft boards examinations during World War I convinced the country that there was a health epidemic. More than half the people had some physical defect or another.

The question of whether this is the state of mankind? In particular tobacco and alcohol abuse were common. Poor eyesight another problems

At this time the annual medical checkup became a standard practice – due to Fisher's advocacy.

Very enlightening writing about 1910, Irving Fisher said "at present, the United States has the unenviable distinction of being the only great industrial nation without compulsory health insurance."

In the end, life insurance companies did become partners in health maintenance. The United States, however, rejected compulsory insurance.

Finally page hundred and 53 mention holler it's tabulating machines

44%. Talking about the sales techniques, sewing doubts about the wife's efficiency and managing fears, and the family needs. They're able to establish a shockingly high level of insurance requirement.

What they don't talk about is the opportunity costs. When you give money to an insurance company, the invested and they give a profit. Also not discussed is the question that of imperfect classification. A person who is a better than average risk is a double loser. He is paying a profit to the insurance company, and he is not getting full credit for having taken care of himself.

There is another question which is difficult to answer. It has to do with how well people survive without money. All lives experienced some hardship, and some are improved by it. The underlying assumption is that money is the single most important factor. This of course cannot be true. Some children come from nothing and do very well. Kaufman, the statistician in his book, is one of them.

This chapter is talks about the early attempts to put a value on human life. Of course it cannot be done, but the exercises worth it. The first gas was $100,000, in 1925.

This chapter is on selling life insurance.

Movement two – prospects defend themselves and say they don't want to talk.

They don't talk about body mass index, build. And don't talk about the differences among the races, such as hypertension among Blacks or different rates for prostate cancer.

How to evaluate housewife services? What is a woman's life worth?

Trying to say how much money will last. The focus should not be on income but on assets. Assets equate to income, especially real estate. If you own two houses, one will be in common the other one will be for living. That will sustain the family.

The Ultima flaw is attempting to use money, and especially a fiat currency, as the measure of all things. It is not. It is only a medium of exchange, a store of value, and a unit of account. The question is whether a person will be able to survive. For that they don't need money, they need the things that money will buy

Interesting tidbit – weight loss programs became a fad in the 1920s.

Mrs. Imus movement three on selling life insurance. The movements don't seem to make that much sense

Lewis Dublin recognize the different ethnicities have different builds. The standardized tables are for white people they don't apply to everybody uniformly.

Talks about Isadora falcon the founding of Social Security. The assumption that the corollary is that society must and does assume the burden of maintaining it when other resources fail or are lacking, and in the political economy, life has a dollar value. That Social Security.

It is interesting that this chapter is cast as a sales pitch. The author is distancing himself from it, quite wisely.

Chapter 7. Failing the future.

You talk about Richard Wright – notes of a native son, the author, who started his life selling insurance.

Insurance was left the black own companies because the whites wouldn't write it. However, the black-owned companies had to also charge premiums to cover their risks, and they were not much cheaper.

He talks about the eugenicists movement, reactive in the teens and 20s, with Irving Fisher and Lewis Dublin among them.

This was part of the immigration argument in the 20s. Lewis Dublin created a hierarchy of Russians, nativeborn Americans, Italians, and scotch wells, and Germans, and at the bottom, the Irish. Note that the Russians were mostly Jews.

He brings in intelligence testing, in connection with immigration. This is rather long stretch from life insurance.

It's interesting that the book does not talk about Thorndike, Jensen, and the other men and

the other leading intelligence researchers.

The eugenicists were worried about declining intelligence. The World War I era tests were quite biased, having culturally loaded questions that discriminated against immigrants.

By the 1930s they had eliminated a lot of the bias.

Was Dublin was a Jewish kid from Lithuania, a protégé of friends but was at Columbia. But was was definitely against a deterministic, biological explanation of intelligence. He was the father of anthropology, something not mentioned here. An interesting oversight

You talk about the 1924 Reed Johnson immigration act. Good to remember the name. Despite Lewis Dublin's efforts, it became law.

You talk about the early about the rate of natural increase, which was of interest to the life insurance companies. This required taking into account what we would not now call the age pyramid, the age structure of a population. It was a new concept in the 1920s.

His conclusion was that the parent growth rate of the white American population massively overstated its true growth rate. In retrospect this is certainly true.

In 1927 life expectancy of Blacks was 46 years, "equivalent to that of white Americans only 30 years ago". This this quote does call into question the justice of different policy prices for Blacks, or excluding coverage for Blacks.

54% Lawrence Brown's critique of charging Blacks higher rates says that JD Craig's assertion that already in all classes the mortality I called lives in material the higher than white lives only held because "white" remained the monolith. In other words, within the white category there might be some that were statistically is Mrs. that substandard the same as Blacks were.

There is a question as to why they black-owned firm did not emerge. Note that similar things happened in the here products industry, and the entertainment industry black and your black and entertainment television and SC Johnson company I think Jesse Johnson were leaders because the whites did not take those markets and they turned out to be profitable

Does not mention discrimination against Blacks and other kinds of insurance, such as automobile insurance. It is race was outlawed, relatively effectively as a discriminator in auto insurance.

Although ZIP Code is still defines race.

In the 1930s, faced with high rates of mortality among their insured, most black insurers raised their rates to the same levels charged by discriminating white companies.

Richard Wright has refreshing honesty, as does this author.

Conclusion numbers in numbering in layers.

This conclusion says that we moved from looking at the risk of death, which had occupied everybody's attention up through the end of the 19th century, to risks to health. In other words society had improved enough that health became a major consideration. Mortality was down. The point is that are are we are risk making and numbering our days in number them still. The conclusion is on numbering.

Layer 1. Our

Well first insurance started for the middle class, but industrial insurance reached out to the working class in the latter part of the 19th century. This represented an extension – they could pretend to have some security that had not before existed. Recapitulate the ringing health into life insurance, putting scales and doctors offices.

Corporate pensions were part another face for welfare capitalism, and some had their own ties to insurance.

Layer 2: days

American life expectancy rose from 51 to 63 for women, and 4859 for men during the first three decades of the 20th century. Days could be lengthened by good practice, "how to live quote" and it became more interesting to measure them.

Podhoretz Junior and Bill Williamson wrote in 1937, on future demographic trends. Interestingly, they posited peak population in 1975, using a logistic curve, and populated and increasingly aging population. This was what Carl Zimmerman saw at the same time. That has all been undone by the baby boom, and immigration, and the fertility of immigrants. The immigrants and minorities.

Social Security was structured because people were comfortable with the practices of life insurance companies operating at that time. Hence the emphasis on the highest wages, and lifetime earnings.

Social Security created critical data sets useful for insurance purposes. For risk measurement.

Discussion of the politics of how the Social Security number was formatted. State systems could not handle alphabetic data as numbers. So the first three are a geographical code, the next to are for mechanical tabulating purposes in the final for an individual identifier.

I do credit IBM on page 230.

Against the gods by Peter Bernstein is the book on the history of risk. This book is a good complement.

My own opinions

First, the rise of insurance closely tracks the rise of data processing. The need always preceded the ability. It is amazing what they did in the 19th century prior to the invention of calculators in the 1890s, electronic accounting machines in the 1910s and 20s, and the field of statistics. But in about the turn-of-the-century. Interesting that he mentions Karl Pearson without crediting him for the invention of statistics

Throughout this is a question of what is the value of life? Is it whose responsibility is it? The initial assumption was that it was each person's responsibility to take care of himself. Around World War I, with the data from life insurance companies, the view changed. It became the responsibility of socially responsible corporations and of government to look after people's health.

This assumption itself seems to be changing, as we have moral hazard created by socialized medicine. People don't take care of themselves, depending on the government to do it for them. This is a an increase in question, as a socialized system throughout the world run out of money and have to budget, allocate, ration healthcare.

Another question is what is the value of the insurance. Today meat the policies are all denominated in national currencies. The skeptics would call those fiat currencies. In terms of the ultimate objective, providing security for a family, they may not do it. If they pay out in annuities, those annuities could be eroded by governments inflation. There is smoothing, and it is still in other people's hands. If there is a one-time payout, there is another moral problem. The beneficiaries may not know how to invest it. There is no discussion of these issues in the book.