# **StatisTics**



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Statistics Denmark Sejrøgade 11 DK-2100 Copenhagen O

Telephone: +45 39 17 39 17 Telefax: +45 39 17 39 99 E-mail: dst@dst.dk Internet: www.dst.dk

Collected and edited by Anne Hermann

Danish texts translated by Anne Hermann and Poul Erik Olesen

Illustrations by Claus Seidel

© A Hard Year - Dedicated to Statistics Denmark by Peter Poulsen

Translated by the author and Sue Trolle

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#### Preface

Though this be madness, yet there is method in't. - *William Shakespeare* 

Figures in databanks are as numerous as the jokes and anecdotes about statistics. Realizing this Statistics Denmark has decided to collect all sorts of anecdotes, quotations, and jokes about statistics and statisticians and to give the public access to them, so that we internationally speaking can be among the best in this relation too.

We hope that our little »sample survey« will be amusing and of inspiration to you.

Leon Østergaard, Communication Manager, got the idea to *StatisTics*. Anne Hermann, Librarian, has collected and edited the many contributions from far and near.

Many stories and quotations are internationally known in many variations throughout the world and of more or less reliable origin. We have tried to refer to the original authors if possible.

A real collection will never be complete - not even this. So, if you are aware of any story about statistics and statisticcians that we don't know, please e-mail your contribution to Anne Hermann, Statistics Denmark: ahe@dst.dk.

May 2005

Jan Plovsing

Leon Østergaard



A statistician and the statistician's wife were marooned on a remote island. When the wife asked how they were going to escape the island and get home, the statistician replied ...

#### A Hard Year Dedicated to Statistics Denmark

I felt unhappy 11.3 times in the past year and happy 8.1. 3.7 times I have deceived my wife and been deceived 5.2. I have stolen 12.60 kroner and 0 ører and I have been robbed of 13 1/2. I have married 0.13 times, been separated 0.10 and divorced 0.75 times. I have become a father to 0.18 children, I have been run down by 0.1437 errand boy bikes and nicked a similar amount of times. I have collided with 8.4 cars, 3.2 motor cycles, half a tube-train and 0.00 trolleys. I have flown 8 times and crashed with 1.6 airplanes, I have shot 0.07 pheasants, zero bulls, zero presidents, I have been to prison 3.4 times, of which 0.2 in confinement. 4.7 times I have been to Malmoe and brought back 1.4 packets of cigarettes and 2.1 pounds of coffee.

I have seen 6.7 films, 3.2 theatre performances, I have drunk 1.3 bottles of whisky And died one and a half times. It has been a hard year if you want my opinion.

- Peter Poulsen

#### Statistics are ...

- fiction in its most uninteresting form. Evan Esar
- the refuge of the uninformed. Audrey Habera & Richard P. Runion
- the science that can prove everything except the usefulness of statistics. *Evan Esar*
- the art of lying by means of figures. William Stekel
- the art of stating in precise terms that which one does not know. *William Kruskal*
- the science which uses easy words for hard ideas. *Unknown*
- like a bikini what they reveal is suggestive but what they conceal is vital. *Aaron Levenstein, etc.*
- the straw out of which I, like every other economist, have to make the bricks. *A. Marshall*
- like people; torture them enough and they'll tell you anything. *Unknown*

- like alienists they will testify for either side. - *Fiorello Laguardia*
- yet another mistress to deceive us. - Spanish proverb

#### More about statistics

Statistics are made from an Ensign and six Privates. - *Marcus Rubin* 

The ardent Devotee of Statistics sees them as an allembracing Kind of top-notch Science, where the Pinnacle represents the human Knowledge of our Time, the indispensable Mentor of the enlightened Statesman and the useful Citizen. - *Axel Holck* 

Purposeful planning for tomorrow must hinge on the statistical data which, in a nutshell, provides a description of yesterday's experiences. - *Kjeld Bjerke, etc.* 

Years ago a statistician might have claimed that statistics deals with the processing of data ... to-day's statistician will be more likely to say that statistics is concerned with decision making in the face of uncertainty. - *H. Chernoff & L. E. Moses* 

Legal proceedings are like statistics. If you manipulate them, you can prove anything. - *Arthur Hailey* 

Oratory is dying; a calculating age has stabbed it to the heart with innumerable dagger-thrusts of statistics. - William Keith Hancock

Historically, Statistics is no more then State Arithmetic, a system of computation by which differences between individuals are eliminated by the taking of an average. It has been used - indeed, still is used - to enable rulers to know just how far they may safely go in picking the pockets of their subjects. - *M. J. Moroney* 

In the original sense of the word, Statistics was the science of Statecraft: to the political arithmetician of the eighteenth century, its function was to be the eyes and ears of the central government. - *Sir Ronald A. Fisher* 

The two most important characteristics of the language of statistics are first, that it describes things in quantitative terms, and second, that it gives this description an air of accuracy and precision. - *Ely Devons* 

Statistics are for losers. - Scotty Bowman

It is now proved beyond doubt that smoking is one of the leading causes of statistics. - *Fletcher Knebel* 

A single death is a tragedy, a million deaths is a statistic. - *Josef Stalin* 

Facts speak louder than statistics. - Geoffrey Streatfield

History is statistics in a state of progression, statistics is history at a stand. - *August Ludwig von Schlözer* 

Statistics can be used to support anything - especially statisticians. - *Franklin P. Jones* 

If at first you don't succeed, transform your data set. - *Unknown* 

If it cannot get beyond its vast abstractions, the national income, the rate of growth, capita/output ratio, input/output ratio analysis, labour mobility, capital accumulation; if I cannot get beyond all this and make contact with the human realities of poverty, frustration, alienation, despair, breakdown, crime, escapism, stress, congestion, ugliness and spiritual death, then let us scrap statistics and start afresh. - *E. F. Schumacher* 

The sign of a truly educated man is to be deeply moved by statistics. - *George Bernard Shaw* 



A statistician is someone who insists on being certain about uncertainty.

## A statistician is ...

- a mathematician broken down by age and sex. *Unknown*
- someone who insists on being certain about uncertainty. *Unknown*
- someone who can draw a mathematically exact line from an unwarranted assumption to a foregone conclusion. *Unknown*
- a person whose lifetime ambition is to be wrong 5 per cent of the time. *Unknown*
- someone who doesn't have the personality to be an accountant. *Unknown*
- someone who doesn't know what he's talking about and make you feel it's your fault. *Unknown*
- a matter-of-fact specialist. Evan Esar
- a specialist who assembles figures and then leads them astray. *Evan Esar*
- a man who believes figures don't lie, but admits that under analysis some of the won't stand up either.
   Evan Esar

## More about statisticians ...

#### The top ten reasons to become a statistician ...

- deviation is considered normal
- we feel complete and sufficient
- we are »mean« lovers
- statisticians do it discretely and continuously
- we are right 95 per cent of the time
- we can legally comment on someone's posterior distribution
- we may not be normal but we are transformable
- we never have to say we are certain
- we are honestly significantly different
- no one wants our jobs.

#### ... and how statisticians do it ...

- statisticians probably do it
- statisticians do it continuously but discretely
- statisticians do it when it counts
- statisticians do it with large numbers
- statisticians do it with significance
- statisticians do it on random walks
- statisticians do it stochastically
- statisticians do it. After all, it's only normal
- statisticians do it with standard deviations
- statisticians do it with 95 per cent confidence
- statisticians do it with only a 5 per cent chance of being rejected.

Daniel's a statistician. He sees numbers - fractions, equations, totals - and they spell out the odds for him. God knows he's brilliant at it; he's saved the lives of hundreds with those statistics. - *Robert Ludlum*  An utterly steady, reliable women, responsible to the point of grimness. Daisy was a statistician for the Gallup Poll. - *Saul Bellow* 

And there was the statistician who was asked how her husband was and replied: »Compared with whom?« - *Unknown* 

Old statisticians never die they just become nonsignificant. - *Unknown* 

Why is a physician held in much higher esteem than a statistician? A physician makes an analysis of a complex illness whereas a statistician makes you ill with a complex analysis. - *Unknown* 

A statistician can have his head in an oven and his feet in ice, and he will say that on the average he feels fine. - Unknown

Statisticians must stay away from children's toys because they regress so easily. - *Unknown* 

Did you hear about the statistician who dove into his swimming pool and broke his neck? He forgot to seasonally adjust his pool. - *Unknown* 

A woman hears from her doctor that she has only half a year to live. The doctor advises her to marry a statistician and to live in South Dakota. The woman asks, »Will this cure my illness?« Answer of the doctor, »No, but the half year will seem pretty long«. - *Unknown* 

»My husband's a professor at M.I.T.«
»Really? What's his field?«
»Statistics.«
»Oh, a real brain. I'm always self-conscious when I meet that sort of mind, I can barely add a column figures.«
»Neither can Ian.« Sheila smiled. »That's my job at the end of every month.« - *Erich Segal*



Ten per cent of all car thieves are left-handed. All Polar bears are left-handed. If your car is stolen, there's a ten per cent chance it was nicked by a Polar bear.

## About applied statistics ...

Again the anger of the LORD was kindled against Israel, and he incited David against them, saying, »Go, number Israel and Judah.«

So the king said to Joab, the commander of the army, who was with him, »Go through all the tribes of Israel, from Dan to Beersheba, and number the people, that I may know the number of the people.«

But Joab said to the king, »May the LORD your God add to the people a hundred times as many as they are, while the eyes of my lord the king still see it, but why does my lord the king delight in this thing?...«

So when they had gone through all the land, they came to Jerusalem at the end of nine months and twenty days. And Joab gave the sum of the numbering of the people to the king: in Israel there were 800,000 valiant men who drew the sword, and the men of Judah were 500,000. - 2 Samuel 24: 1-3, 8-9

In those days a decree went out from Caesar Augustus that all the world should be registered.

This was the first registration when Quirinius was governor of Syria.

And all went to be registered, each to his own town.

And Joseph also went up from Galilee, from the town of Nazareth, to Judea, to the city of David, which is called Bethlehem, because he was of the house and lineage of David, to be registered with Mary, his betrothed, who was with child.

- Luke 2: 1-5

For I am one of the unpraised, unrewarded millions without whom Statistics would be a bankrupt science. It is we who are born, who marry, who die, in constant ratios. - *Logan Pearsall Smith* 

He uses statistics as a drunken man uses lamp-posts - for support rather than illumination. - *Andrew Lan, etc.* 

Statistics is concerned with things we can count. In so far as things, persons, are unique and ill-defined, statistics are meaningless and statisticians silenced; in so far as things are similar and definite - so many workers over 25, so many nuts and bolts made during December - they can be counted and new statistical facts are born. - *M. S. Bartlett*.

Statistics show every two minutes another statistic is created. - *Unknown* 

Not everything that counts can be counted, and not everything that can be counted counts. - *Albert Einstein* 

It does not follow that because something *can* be counted it therefore *should* be counted. - *Harold L. Enarson* 

No human mind is capable of grasping in its entirety the meaning of any considerable quantity of numerical data. - *Ronald A. Fisher* 

My data were very lax but this method of treatment got all good out of them that they possessed. - *Francis Galton* 

The moment you forecast you know you're going to be wrong, you just don't know when and in which direction. - *Edgar R. Fiedler* 

When you know absolutely nothing about the topic, make your forecast by asking a carefully selected probability sample of 300 others who don't know the answer either. - *Edgar R. Fiedler* 

I'm a woman. I'm a black woman. I'm a poor woman. I'm a fat woman. I'm a middle-aged woman. And I'm on welfare. In this country, if you're any one of those things you count less as a person. If you're all those things, you just don't count, except as a statistic. - *Johnnie Tillmon* 

Of course statistical graphics, just like statistical calculations, are only as good as what goes into them. An ill-specified or preposterous model or puny data set cannot be rescued by a graphic or calculation, no matter how clever or fancy. A silly theory means a silly graphic. *- Edward R. Tufte* 

A theory has only the alternative of being right or wrong. A model has a third possibility it may be right, but irrelevant. - *Manfred Eigen* 

Probability is expectation founded upon partial knowledge. A perfect acquaintance with *all* the circumstances affecting the occurrence of an event would change expectation into certainty, and leave neither room nor demand for a theory of probabilities. *- George Boole* 

79.48 per cent of all statistics are made up on the spot. - *John A. Paulos* 

Ten per cent of all car thieves are left-handed. All Polar bears are left-handed. If your car is stolen, there's a ten per cent chance it was nicked by a Polar bear. - *Unknown* 

39 per cent of unemployed men wear spectacles.80 per cent of employed men wear spectacle.Work stuffs up your eyesight. - *Unknown* 

A total of 4000 cans are opened around the world every second. Ten babies are conceived around the world every second. Each time you open a can, you stand 1 in 400 chance of falling pregnant. - *Unknown* 



She was reading birth and death statistics. Suddenly she turned to a man near her and said ...

#### About the unbearable lightness of statistics

The best way of increasing the average intelligence of statisticians would be to reduce their number. - *Alexis Carrel* 

50 per cent of our schoolchildren have IQ's below average. Under our education policy, we can turn that around! - *Unknown* 

Statistics show that of those who contract the habit of eating, very few survive. - *Wallace Irwin* 

Some say that if you laid all the statisticians on the face of the earth end to end it would be a very good thing. Others note that if you laid all the statisticians end to end, two thirds would be under water. - *Unknown* 

»You got a ninety per cent chance«, he said. Osano said quickly, »How do you get that figure?« He always did that whenever somebody pulled a statistic on him. He hated statistics. - *Mario Puzo* 

One survey found that ten per cent of Americans thought that Joan of Arc was Noah's wife. - *Robert Boynton* 

What does a statistician call it when the heads of 10 rats are cut off and 1 survives? Non significant! - *Unknown* 

A politician travelling in Scotland looked out of the window and saw a number of black sheep. »That's interesting,« he said, »all Scottish sheep are black.« »No, no,« warned his agent. »Don't make positive statements like that. Best just say 'Some Scottish sheep are black.' Isn't that right, Jan?« Jan, a statistician, replied, »Well, on the evidence so far, the only thing you can say is: Some Scottish sheep are black - on one side.« - Unknown

## Did you hear about:

- the four statisticians who were caught in a boating shop tossing packages of canvas around? It turned out they were just forecasting sales.
- the statistician who went out on a limb to obtain a nested design?
- the statistician who attempted the distribution of joints but was arrested by the vice squad?
- the statistician who was looking all over for the sum of eigenvalues from a variance-covariance matrix but couldn't find a trace?
- the non-parametrician who couldn't get his driving license? He couldn't pass the sign test.
- the two binomial random variables who talked very quietly because they were discrete?
- the ancient Roman statistician who was always called a nerd? Turns out he was just a Latin Square.
- the father and son station wagon? Talk about a case of auto-correlation!
- the nine-foot tall Roman numeral who took over Congress and outlawed decimals? It was just a case of the strong law of large numbers.

Three men are in a hot-air balloon.

Soon, they find themselves lost in a canyon somewhere. One of the three men says, »I've got an idea. We can call for help in this canyon and the echo will carry our voices far.«

So he leans over the basket and yells out, »Helllloooooo! Where are we?« (They hear the echo several times).

Fifteen minutes pass. Then they hear this echoing voice: »Helllloooooo! You're lost!!« One of the men says, »That must have been a statistician.« Puzzled, one of the other men asks, »Why do you say that?«

The reply: »For three reasons. (1) he took a long time to answer, (2) he was absolutely correct, and (3) his answer was absolutely useless.« - *Unknown* 

When she told me I was average, she was just being mean. - Unknown

Like dreams, statistics are a form of wish fulfilment. - *J. Baudrillard* 

Did you know that the great majority of people have more than the average number of legs? It's obvious really; amongst the 57 million people in Britain there are probably 5,000 people who have got only one leg. Therefore the average number of legs is: ((5000 \* 1) + (56,995,000 \* 2)) / 57,000,000 =1.9999123. Since most people have two legs ... - Unknown

A physicist, a biologist, and a statistician see two people enter a house, and then after some time, they see three people leave the house.

The physicist concludes, »My initial observation must have been incorrect.« The biologist concludes, »Clearly, the two reproduced...« The statistician concludes, »Well, if one more person enters the house, then there will be no-one in the house!« - *Unknown* 

A statistician's wife had twins. He was delighted. He rang the minister who was also delighted. »Bring them to church on Sunday and we'll baptize them,« said the minister. »No,« replied the statistician. »Baptize one. We'll keep the other as a control.« - *Unknown* 

A statistician who travels a lot was concerned about the possibility of a bomb on board his plane. He determined the probability of this, found it to be low but not low enough for him. So now he always travels with a bomb in his suitcase. He reasons that the probability of two bombs being on board would be infinitesimal. - John A. Paulos

Did you hear about the statistician who drowned in a lake averaging 2 inches in depth? - *Unknown* 



All dogs are animals. All cats are animals. Therefore all dogs are cats. - *Unknown* 

A knowledge of statistics is like a knowledge of foreign languages or of algebra; it may prove of use at any time under any circumstances. - *A. L. Bowley* 

Two unbiased estimators were sitting in a bar. The first says, »So how do you like married life?« The other replies, »It's pretty good if you don't mind giving up that one degree of freedom!« - *Unknown* 

She was reading birth and death statistics. Suddenly she turned to a man near her and said, »Do you know that every time I breathe a man dies?« »Very interesting,« he returned, »have you tried toothpaste?« - Jacob M. Braude

It is proven that the celebration of birthdays is healthy. Statistics show that those people who celebrate the most birthdays become the oldest. - *S. den Hartog* 

Half population is below median intelligence. Well over half the population is above average. This is due to the fact that there is a limit to human intelligence, but no limit to human stupidity. - *Unknown* 

In earlier times, they had no statistics, and so they had to fall back on lies. - *Stephen Leacock* 

A statistician and the statistician's wife were marooned on a remote island. When the wife asked how they were going to escape the island and get home, the statistician replied, »Assuming we had a boat ...« - Unknown

»Multiple births are more frequent in larger families,« declares a statistician. It's mighty hard to fool these statisticians. - *Unknown*  A stats major was completely hung over the day of his final exam. It was a True/False test, so he decided to flip a coin for the answers. The stats professor watched the student the entire two hour as he was flipping the coin ... writing the answer ... flipping the coin ... writing the answer. At the end of the two hours, everyone else had left the final except the one student. The professor walks up to his desk and interrupts the student, saying: »Listen, I have seen that you did not study for this statistics test, you didn't even open the exa. If you are flipping a coin for your answer, what is taking you so long?« the student replies bitterly (as he is still flipping the coin): »Shhh! I am checking my answers!« - *Unknown* 

The difference between an economist and a statistician is that people believe what economists say about the future, but not what statisticians say about the past. - Unknown

A somewhat advanced society has figured how to package basic knowledge in pill form. A student, needing some learning, goes to the pharmacy and asks what kind of knowledge pills are available. The pharmacist says, »Here's a pill for English literature.« The student takes the pill and swallows it and has new knowledge about English literature! »What else do you have?« asks the student. »Well, I have pills for art history, biology, and world history,« replies the pharmacist. The student asks for these, and swallows them and has new knowledge about those subjects! Then the student asks, »Do you have a pill for statistics?« The pharmacist says, »Wait just a moment«, and goes back into the storeroom and brings back a whopper of a pill that is about twice the size of a jawbreaker and plunks it on the counter. »I have to take that huge pill for statistics?« inquires the student. The pharmacist understandingly nods his head and replies, »Well, you know statistics always was a little hard to swallow.« - Unknown