Introduction

Richard Gill, Statistics lunch seminar MI, 19 October 2020

https://www.math.leidenuniv.nl/~gill
gill@math.leidenuniv.nl

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Interests

Henk Barendregt

- Family

- Cycling and walking

- Nature and the environment

- Art, film, reading, music, home wine brewing, …

- Running old mac's, genealogy, …

- Fungi (especially edible mushrooms)

- Buddhism and meditation   (Theravada; Vipassana)

- Fighting injustice

- Scientific integrity

- Forensic statistics

- Statistics in the media and in popular science

- Quantum information and quantum foundations
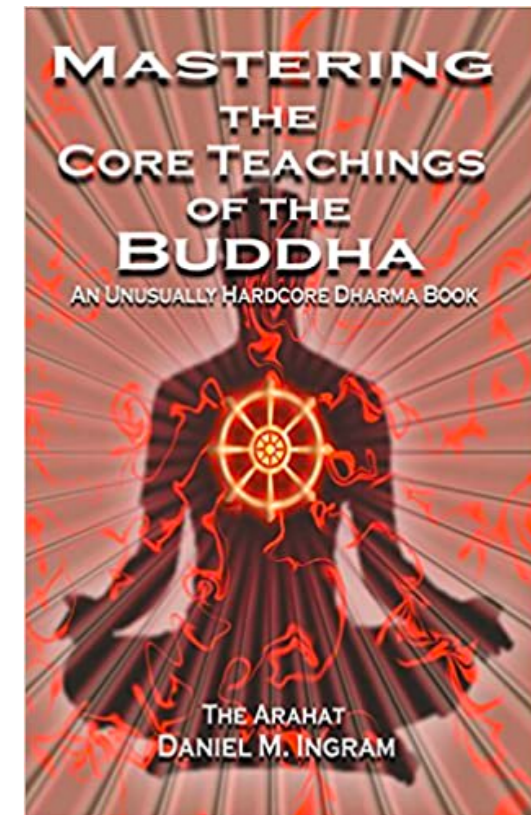
Daniel Ingram

Fighting injustice; scientific integrity; forensic statistics:
the down side

- Twice, a main suspect in a criminal investigation

- Once, threatened with civil legal action by most evil law firm in NL (mission: protect reputation of powerful people)

- Once, subject of a Leiden University investigation into alleged violation of scientific integrity

- Several powerful enemies …

- Twice banned from editing Wikipedia

Richard David Gill (born 11 September 1951) is a mathematician born in the United Kingdom who has lived in the Netherlands since 1974. As a probability theorist and statistician, Gill is most well known for his research on counting processes and survival analysis, some of which has appeared in an advanced textbook. Now retired, he was the chair of mathematical statistics at Leiden University. Gill is also known for his pro bono consulting and advocacy on behalf of victims of incompetent statistical testimony, including a Dutch nurse who was wrongfully convicted and jailed for six years.

| Richard David Gill	
Richard D. Gill	
Born	11 September 1951 Redhill, Surrey
Citizenship	British
Alma mater	University of Cambridge Free University of Amsterdam (PhD)
Scientific career	
Institutions	Utrecht University Leiden University
Doctoral students	Sara van de Geer, Mark van der Laan

Contents

Biography

Statistical advocacy against wrongful convictions

Honors

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External links

Biography

He studied mathematics at the University of Cambridge (1970–1973), and subsequently followed the Diploma of Statistics course there (1973–1974).

Marrying a Dutch woman, he moved to the Netherlands where he worked from 1974 to 1988 at the Mathematical Centre (later renamed *Centrum Wiskunde & Informatica*, or CWI) of Amsterdam. In 1979, Gill obtained his PhD with the thesis *Censoring and Stochastic Integrals*, which was supervised by Jacobus Oosterhoff of the Vrije Universiteit, which awarded the doctorate.[1] Gill spent Autumn 1980 at the Statistical Research Unit at the University of Copenhagen. Gill continued to collaborate with Danish (and Norwegian) statisticians for ten years, helping to write the book *Statistical models based on counting processes*, which is often referred to as "ABGK" (for the authors Andersen, Borgan, Gill, and Keiding).[2] In 1983 he became the head of the Department of Mathematical Statistics at CWI.

In 1988 he moved to the Department of Mathematics of Utrecht University. Gill became the chair in mathematical stochastics—this chair represented the three mathematical sciences of mathematical statistics, probability theory, and operations research. His PhD students include Sara van de Geer and Mark van der Laan.[1]

In 2006, he moved to the Department of Mathematics at Leiden University, where he became the chair of mathematical statistics. Since then, he has conducted statistical research in the theory of quantum information, forensic statistics, scientific integrity and in biostatistics. He has also worked on survival analysis, semiparametric models, causality, missing data, machine learning, and statistics

Statistics
Probability
Mathematics
Quantum foundations
Forensic science

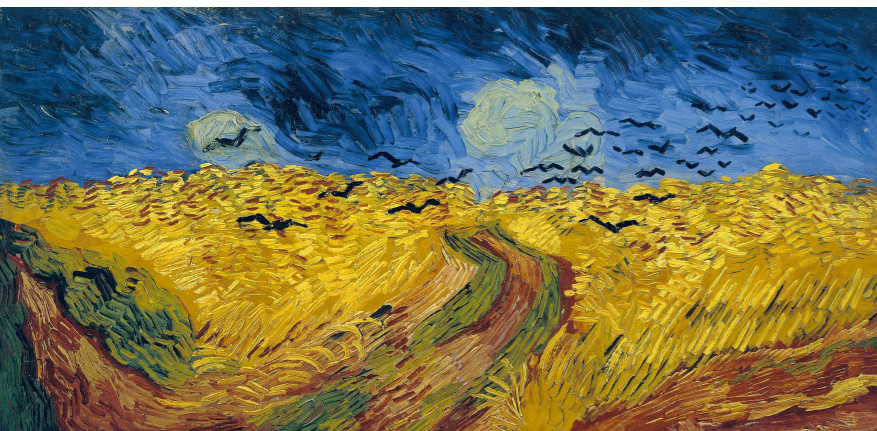|	CITED BY	YEAR
Statistical models based on counting processes PK Andersen, Ø Borgan, RD Gill, N Keiding Springer	5152 *	1993
Cox's regression model for counting processes: a large sample study PK Andersen, RD Gill The annals of statistics, 1100-1120	4257	1982
Censoring and stochastic integrals RD Gill Mathematical Centre, Amsterdam (MC Tract 124)	973	1980
A counting process approach to maximum likelihood estimation in frailty models GG Nielsen, RD Gill, PK Andersen, TIA Sørensen Scandinavian journal of Statistics, 25-43	710	1992
Large sample behavior of the product limit estimator on the whole line RD GILL	504	1981
A survey of product-integration with a view toward application in survival analysis RD Gill, S Johansen The annals of statistics, 1501-1555	503	1990
Non-and semi-parametric maximum likelihood estimators and the von Mises method (part 1) RD Gill Scandinavian Journal of Statistics, 97-128	497	1989
Applications of the van Trees inequality: a Bayesian Cramér-Rao bound RD Gill, BY Levit Bernoulli 1 (1-2), 59-79	351	1995
State estimation for large ensembles RD Gill, S Massar Physical Review A 61, 042312 (16 pp.)	269 *	2000

Life-changers
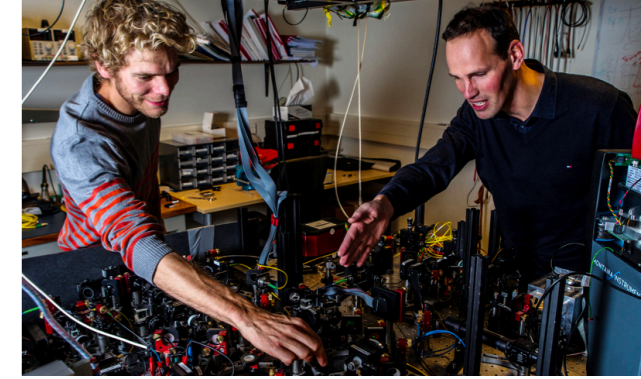
- The case of Lucia de B

- Martingale methods designed to fight quantum crackpots adopted in "loophole-free" Bell experiments
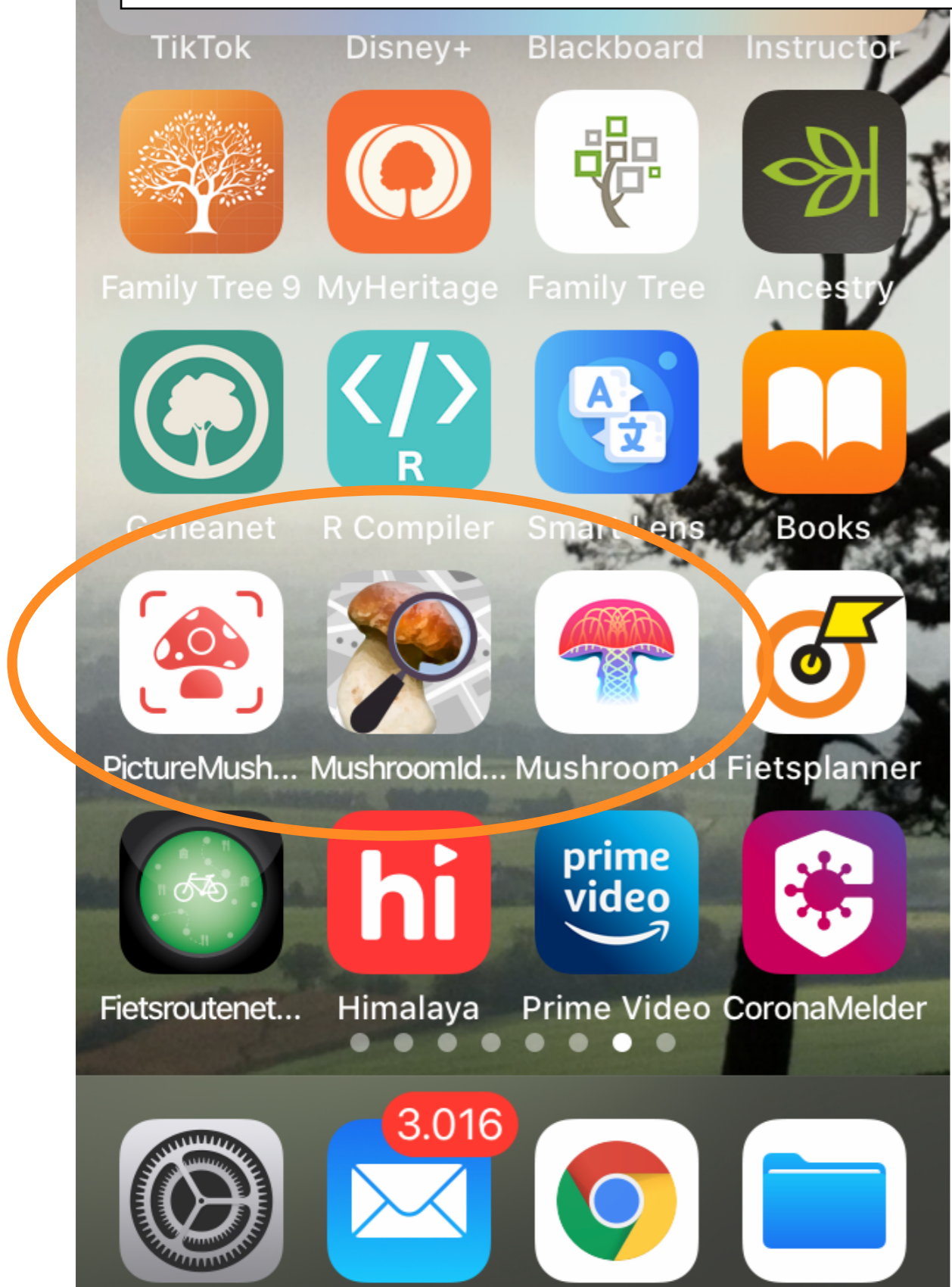
- Major depressive episodes; heart failure; ...

21. Gill, R. D. Time, finite statistics, and Bell's fifth position. In *Proc. Foundations of Probability and Physics 2* 179–206 (Växjö Univ. Press, 2003).

At the MI

- Occasional master and bachelor project supervision

- Occasional master exam chair

- Participate in some seminars and study groups

A new project?

These apps are impressive, and use deep learning ... and they are lethal

Macrolepiota procera
Parasol mushroom
Grote parasolzwam

Amanita muscaria
Fly agaric
Vliegenzwam

Leucoagaricus leucothites
White dapperling
Blanke champignonparasol

Laetiporus sulphureus
Chicken of the woods
Gewone zwavelzwam

Amanita phalloides
Death cap
Groene knolamaniet

Fistulina hepatica
Beefsteak mushroom
Biefstukzwam

Volvariella volvacea

Amanita phalloides

Leucoagaricus leucothites

Which is the odd one out?

Answers

Each of the three is an odd one out on a number of different criteria

- *Volvariella volvacea* : straw mushroom / tropische beurszwam, rijststro-paddenstoel

- *Amanita virosa* : destroying angel / kleverige knolamaniet

- *Leucoagaricus leucothites* : white dapperling, white Agaricus mushroom / Blanke champignonparasol

For example:

Volvariella volvacea is not native to Europe, the others are common here.
Amanita virosa is deadly, the others are delicious.
Leucoagaricus leucothites does not have a Dutch Wikipedia page (the Dutch find white mushrooms with white gills frightening)