Cannlytics

Cannabis Data Science

Cannabis Data Science #57

March 16th, 2022

What Data Science Brings to the Table

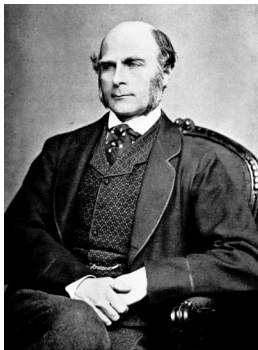Daily wind patterns of Britain mapped by Francis Galton, *Meteorographica* (1863).

"...by drawing diagrams, and by countings. This much suffices to give a correct idea of the **distribution** *of any given set of variables ; it is also sufficient to give a fair idea of the closeness of* **correlation***, or of kinship, between any two sets of variables."*

— **Francis Galton** in a letter to the editor of
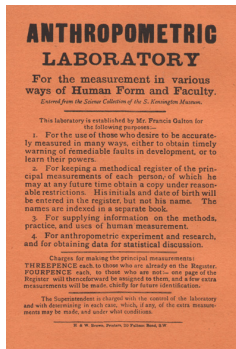*The Times* on *Alcoholism and Offspring.*

An Odd History of Data Exploration

Sir Francis Galton opened an anthropometric laboratory to

> *"show the public the simplicity of the instruments and methods by which the chief physical characteristics of man may be measured and recorded."*

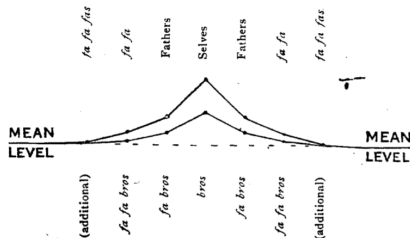Sir Francis Galton (1822 – 1911) in the 1850s.

Flyer advertising the Anthropometric Laboratory.
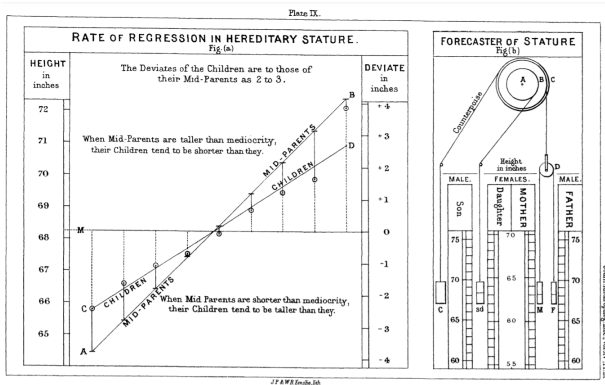
Francis Galton's Fingerprint on Data Science

- Penchant for counting and measuring.

- Founded the biometric approach to the study of heredity.

- Taught and founded *Biometrika* with Karl Pearson.

- Introduced the concepts:
  - **standard deviation**;
  - **correlation**;
  - **regressions**.

Distribution of Successes and of Natural Ability Among the Kinsfolk of Fellows of the Royal Society (1904).

Francis Galton's Work

An application of regression and prediction by Francis Galton in *Anthropological Miscellanea* (1886).

- Created a dataset of 9,337 respondents, each measured in 17 categories.
- After applying the liner regression to sweat peas, Francis Galton applied regressions to the human data.

An aside on studying

Weekly Evening Meeting By Francis Galton
On Men of Science, their Nature and their Nurture

- <u>Not tied down</u> to old courses of classics and mathematics.

- Sufficient groundwork in many subjects to avoid error.

- Early introduced to <u>many subjects</u> of interest.

- A well–balanced education, including **chemistry**, **botany**, **logic**, and **political economy**.

- A variety of subjects, and <u>attention to details</u>.

- Coming in contact with persons of every rank and sitting in the same form.

🙏 **Thank you for coming.**

Lessons of the Day

- Measurements vary.

- Exploring your data is an critical, yet often overlooked, step in gleaming insights.