

Trust your Eyes -

Grundlagen der Visualisierung
und wie man mit Visualisierungen
„faken“ kann

Überblick

- Was ist Visualisierung? - Beispiele
- Theorie der Visualisierung
 - Definition
 - Referenzmodelle (Pipelines)
 - Mantra (Informationssuche u. Visual Analytics)
- Wahrnehmung/ Gestaltprinzipien
- „Faken“ mit Visualisierungen

Definition „Visualisierung“

„The use of computer supported, interactive, visual representation of data to amplify cognition“

(Card u. a. 1999, 6)

Die visuelle Repräsentation von (abstrakten) Daten, um inhärente Sachverhalte und Korrelationen zu offenbaren.

Mantra der Informationssuche

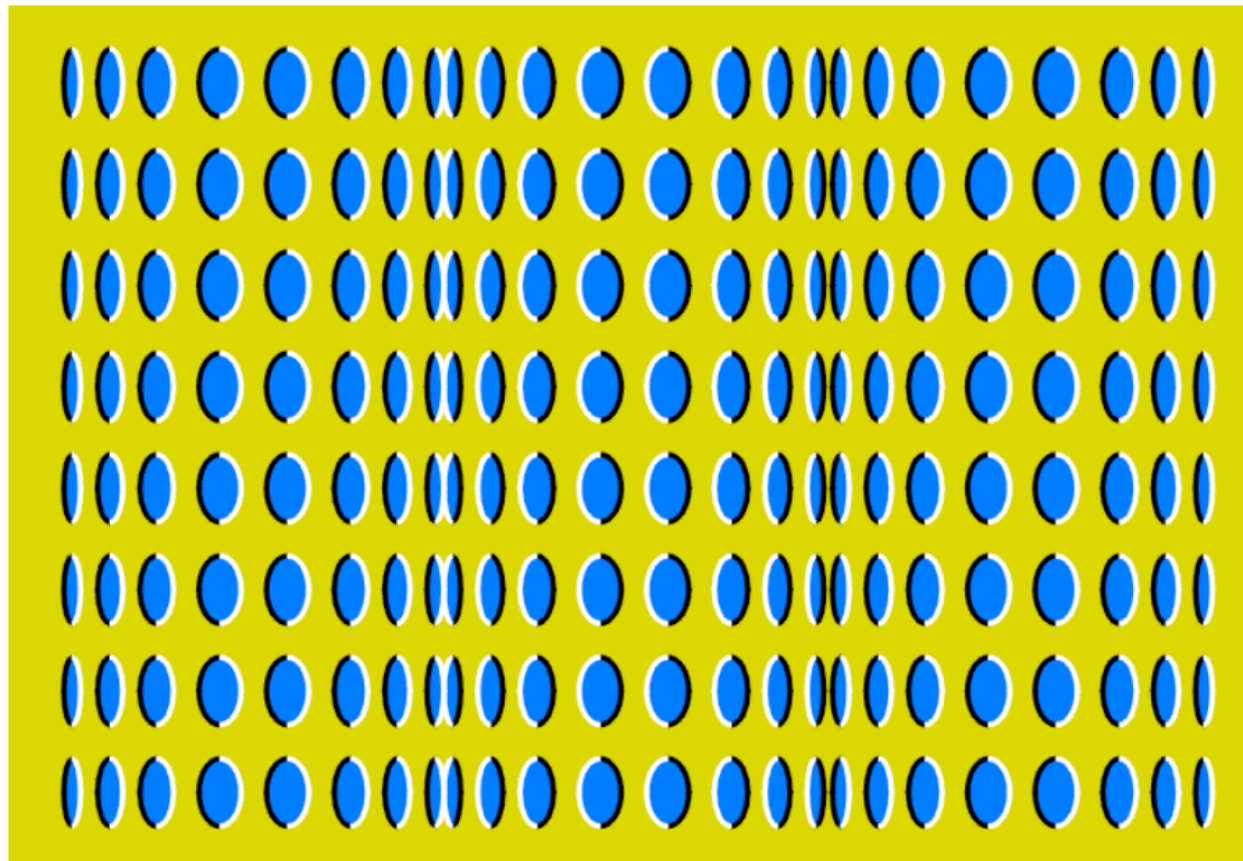
„Overview first, zoom and filter, then details-on-demand, (relate, history and extract)“

[Shneiderman1996]

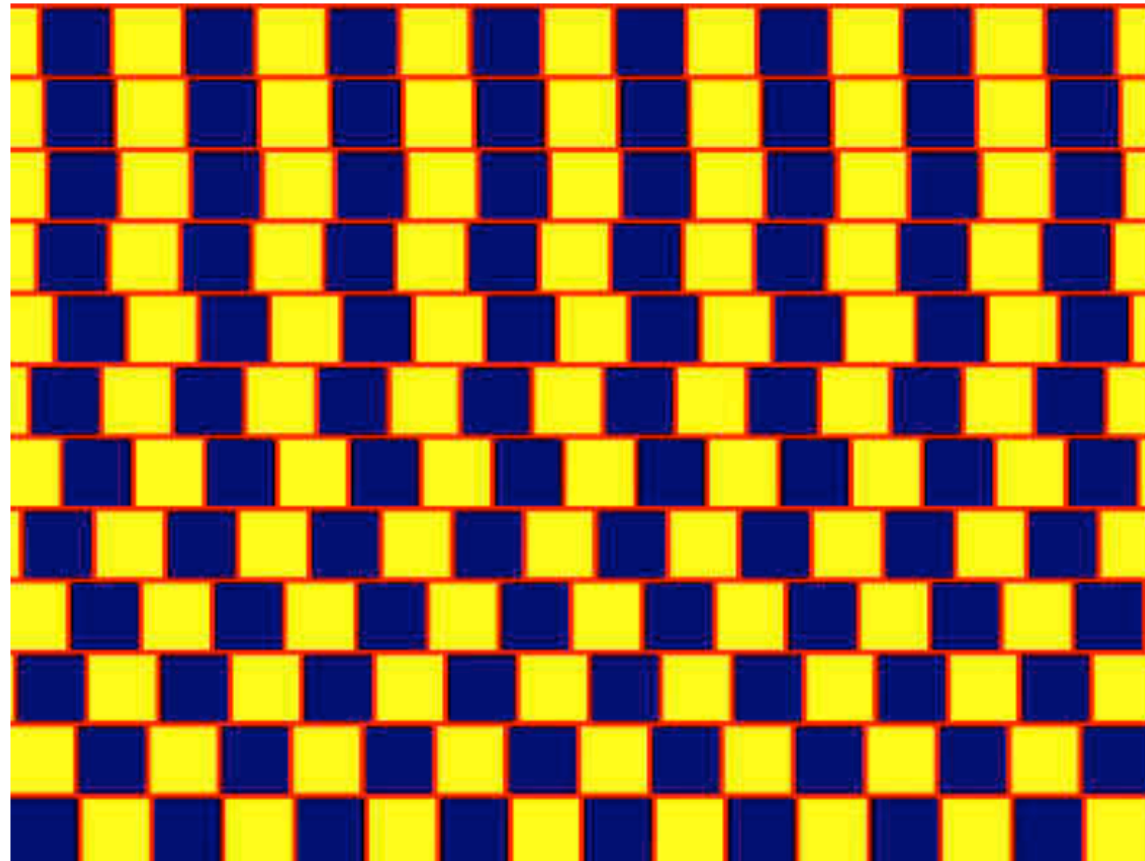
„Analyse First - Show the Important - Zoom, Filter and Analyse Further - Details on Demand“

[Keim2005]

Wahrnehmung



Wahrnehmung



Wahrnehmung



29.12.2006

Überblick
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Beispiele
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Theorie
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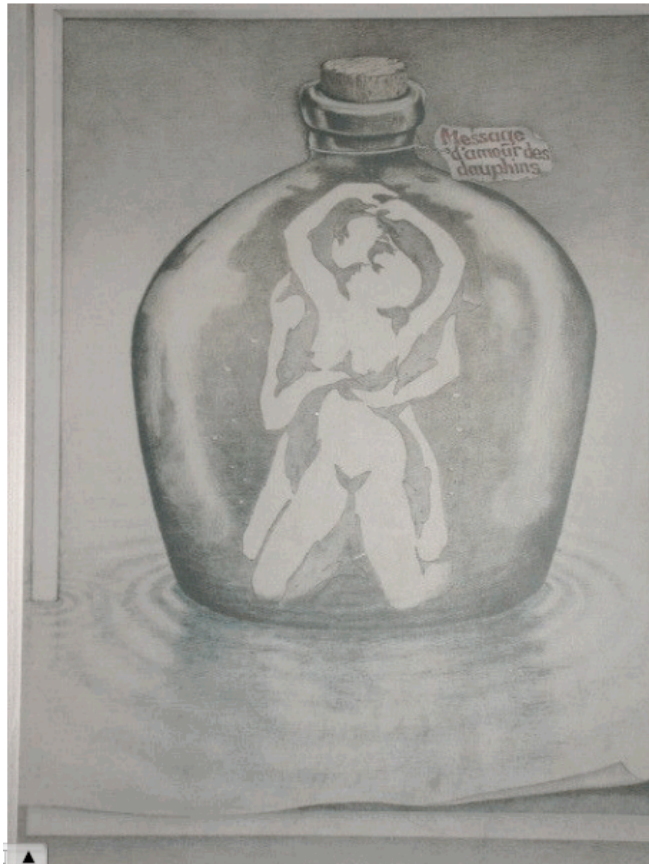
Wahrnehmung
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„Faken“ mit Visualisierungen
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Quellen
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Vortrag 23C3:
Trust your Eyes - S. Öttl

Wahrnehmung



29.12.2006

Überblick
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Beispiele
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Theorie
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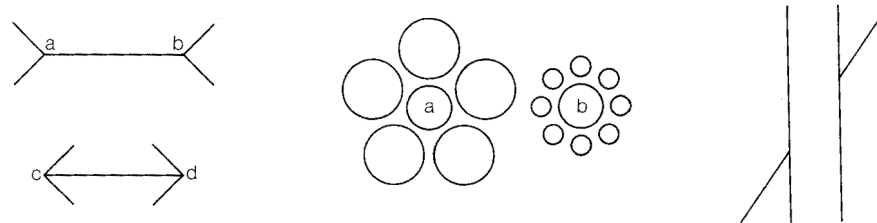
Wahrnehmung
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„Faken“ mit Visualisierungen
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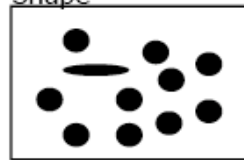
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Vortrag 23C3:
Trust your Eyes - S. Öttl

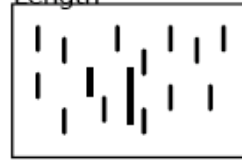
Wahrnehmung/ Gestaltprinzipien



Shape



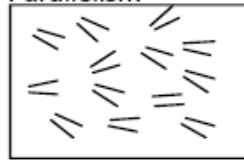
Length



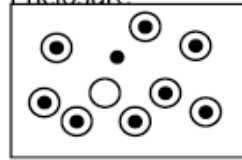
Width



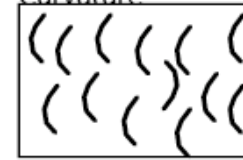
Parallelism



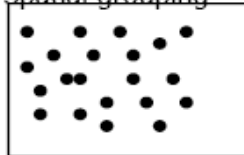
Enclosure



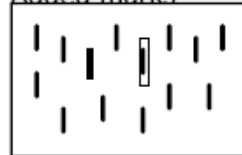
Curvature



Spatial grouping



Added marks

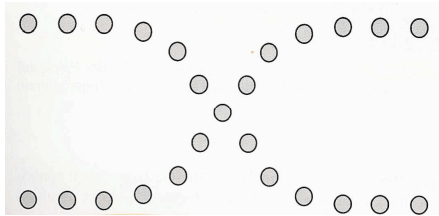
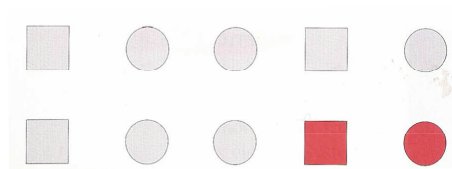


Number



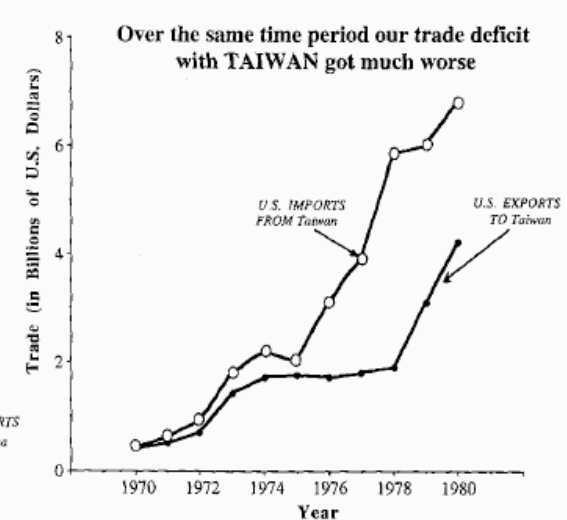
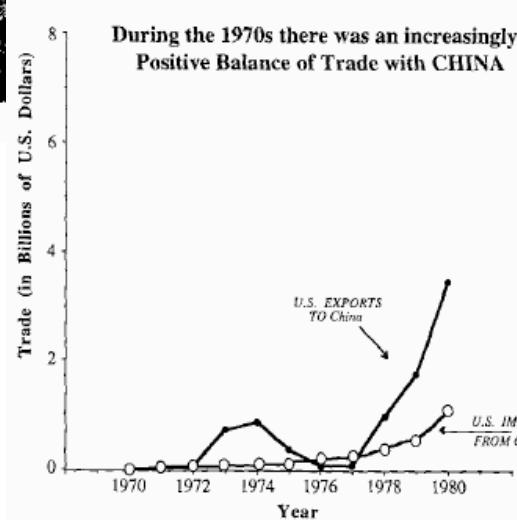
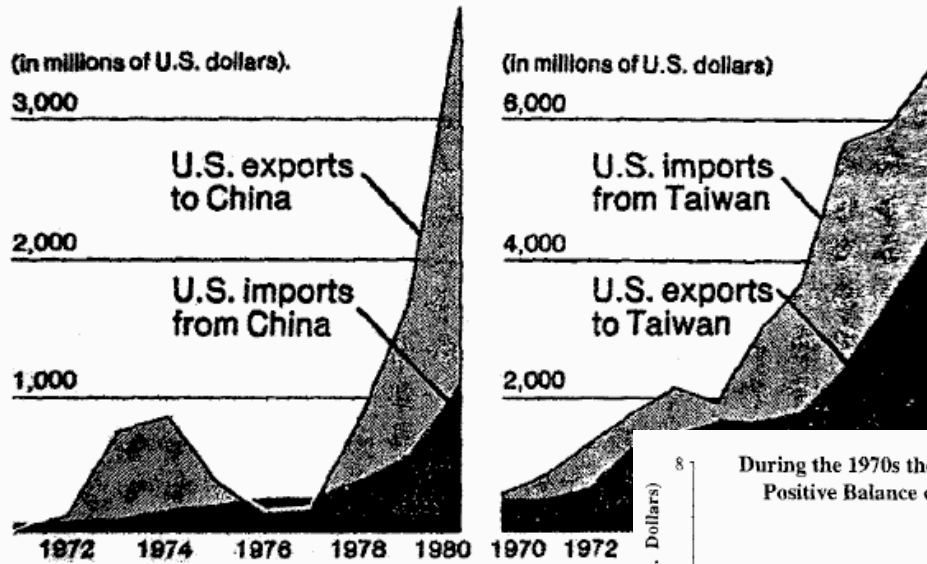
Wahrnehmung/ Gestaltprinzipien

TAE CAT



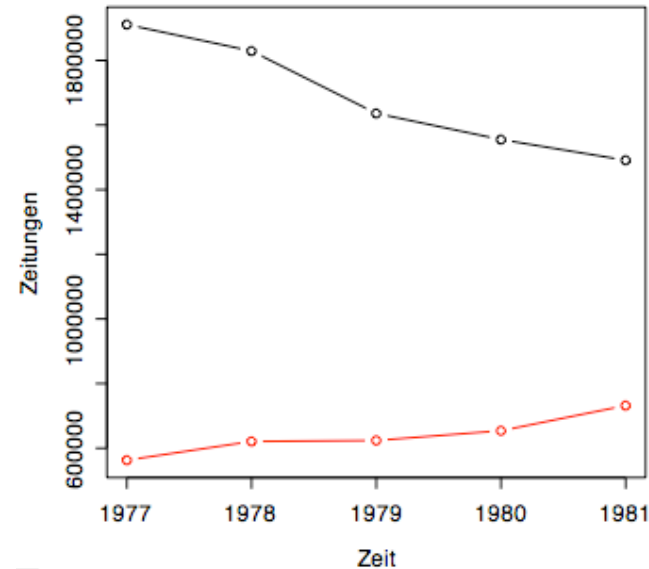
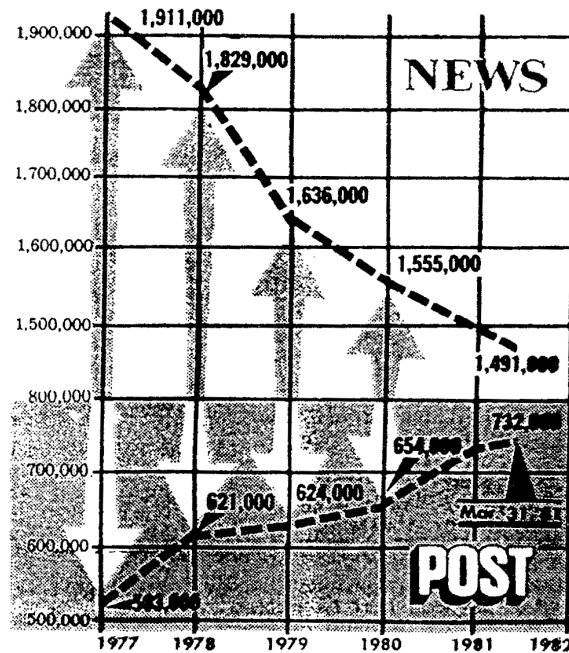
Auf Legenden achten!

U.S. trade with China and Taiwan

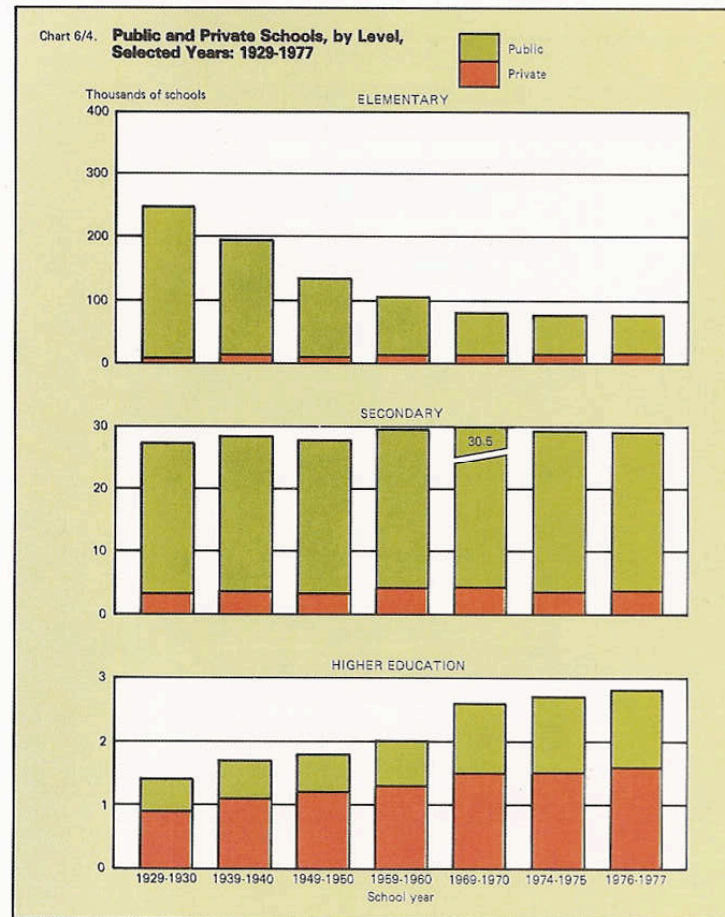


Auf die Skala achten!

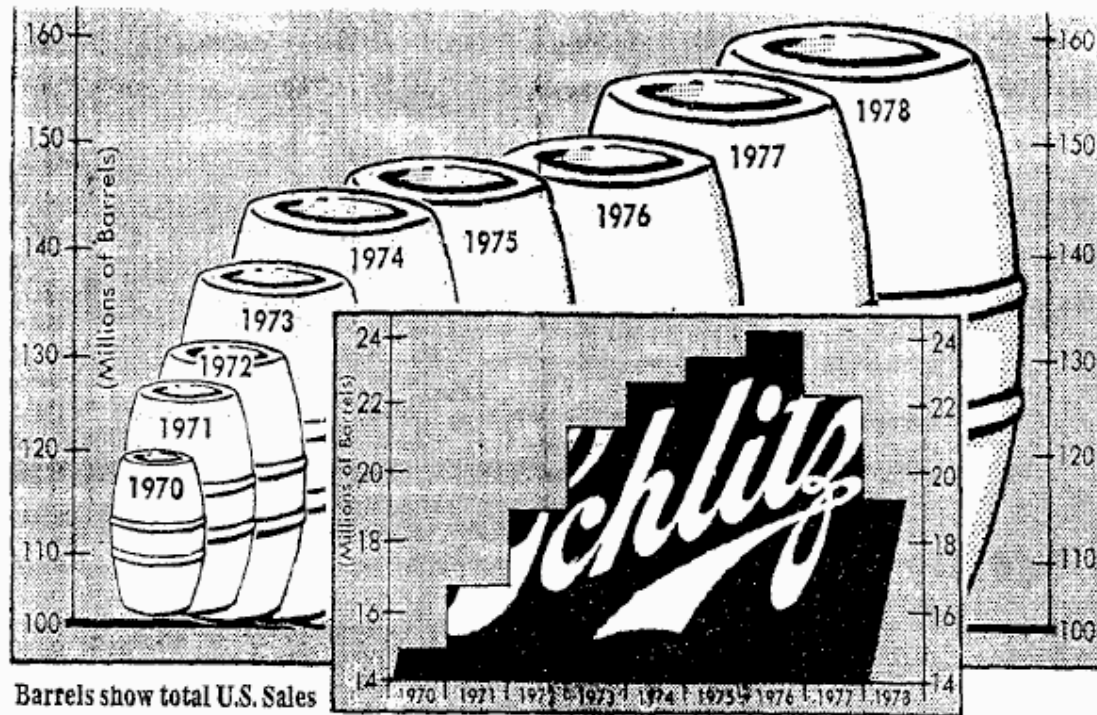
The soaring Post — the daily paper New Yorkers trust



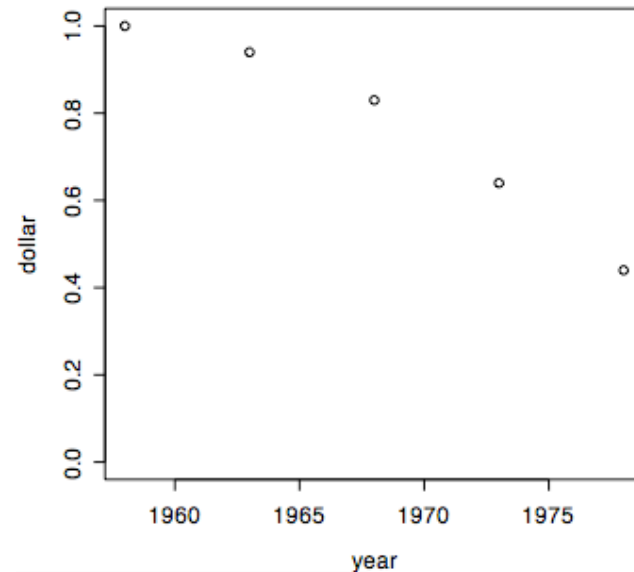
Kombinationen können verfälschen!



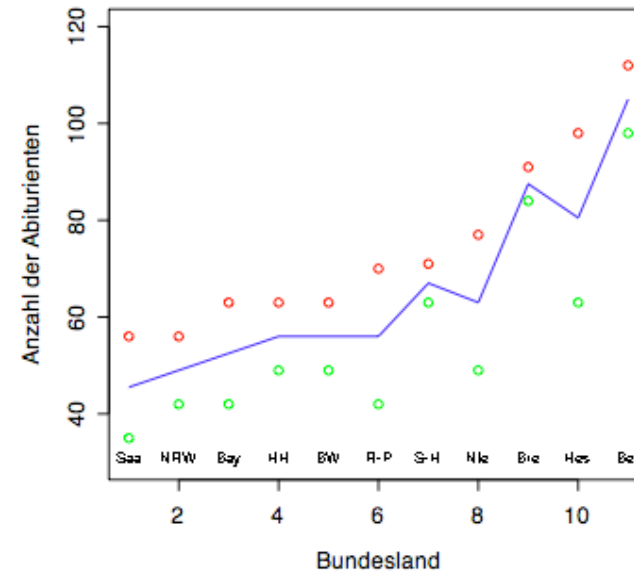
Auf Volumen achten!



Auf Volumen achten!



Daten zeigen!



Quellen

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Weitere Fragen?
Anmerkungen?

Danke für Ihre Aufmerksamkeit!