

Visualiser des données.

Le point de vue du designer.

Le design est une **façon de penser**.

C'est aussi une façon de **se situer**,
d'**explorer un problème** objectif,
et de déterminer des approches pour **concevoir et évaluer**
des **solutions** ingénieuses et adaptées à ce problème.

Le designer établit des **méthodes** et des **processus**
pour communiquer des solutions
et les mettre en application.

Le problème.





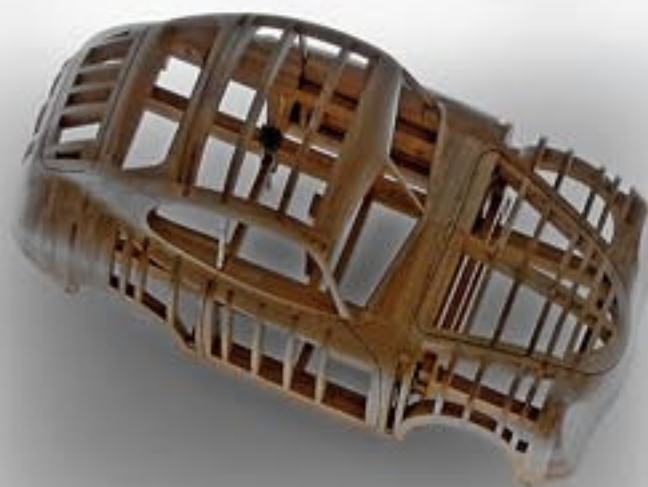


La solution.



Design de l'information :
mise en forme, **architecture** et **hiérarchie** de l'information.

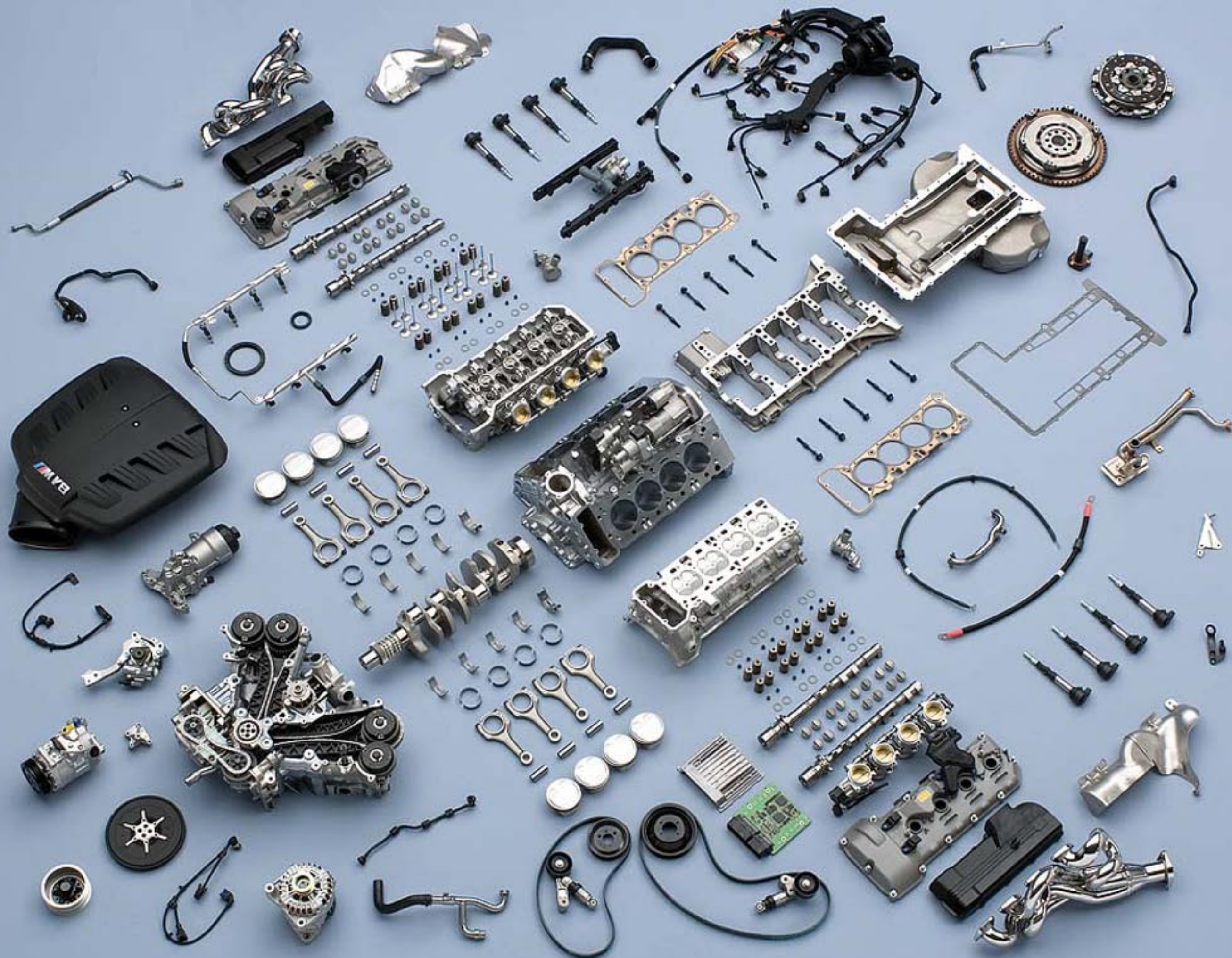
Classer pour **clarifier**, pour **signifier**.





Andreas Gursky : Andreas Gursky, 99 Cent II Diptychon (2001) http://en.wikipedia.org/wiki/Andreas_Gursky







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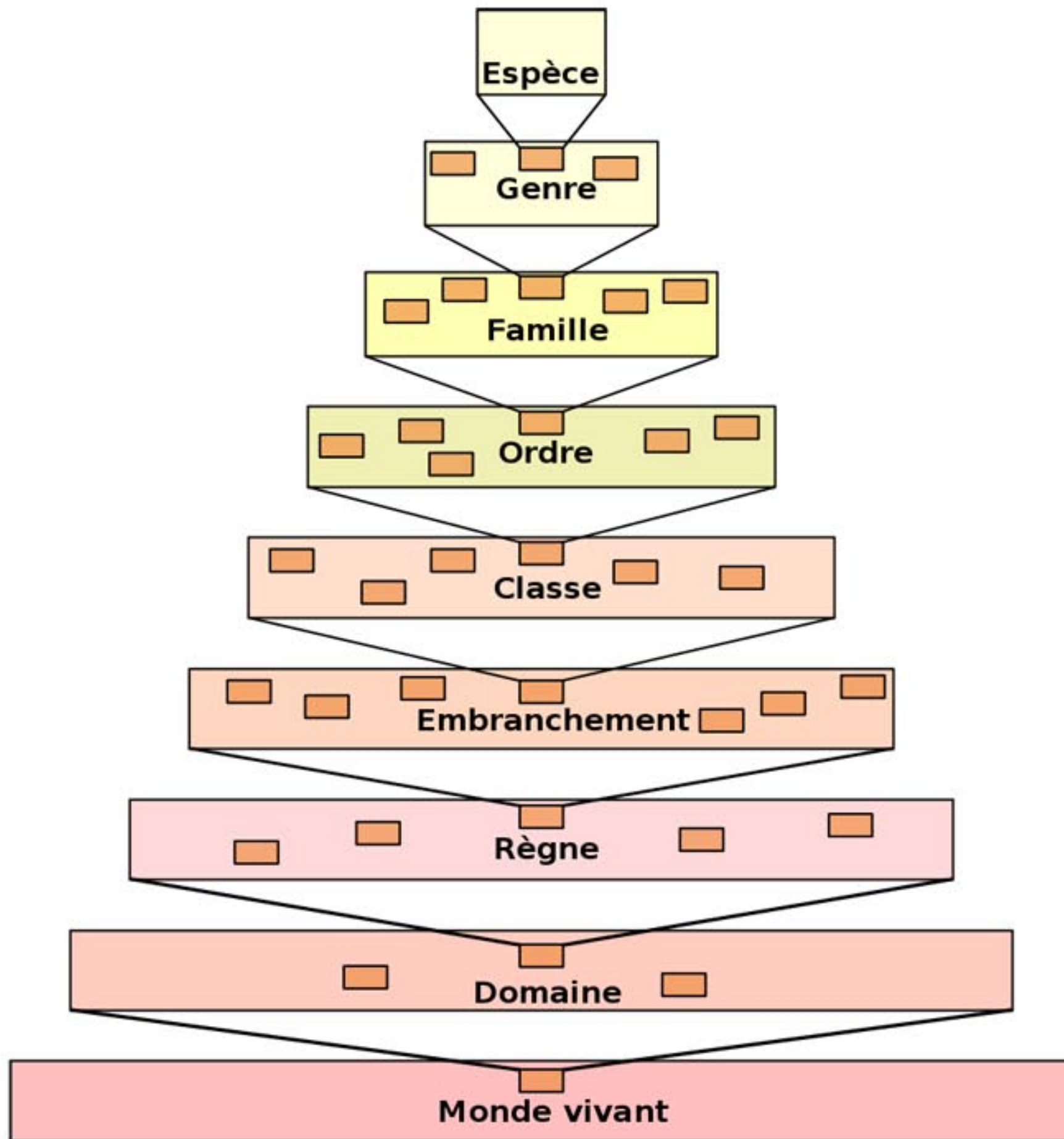




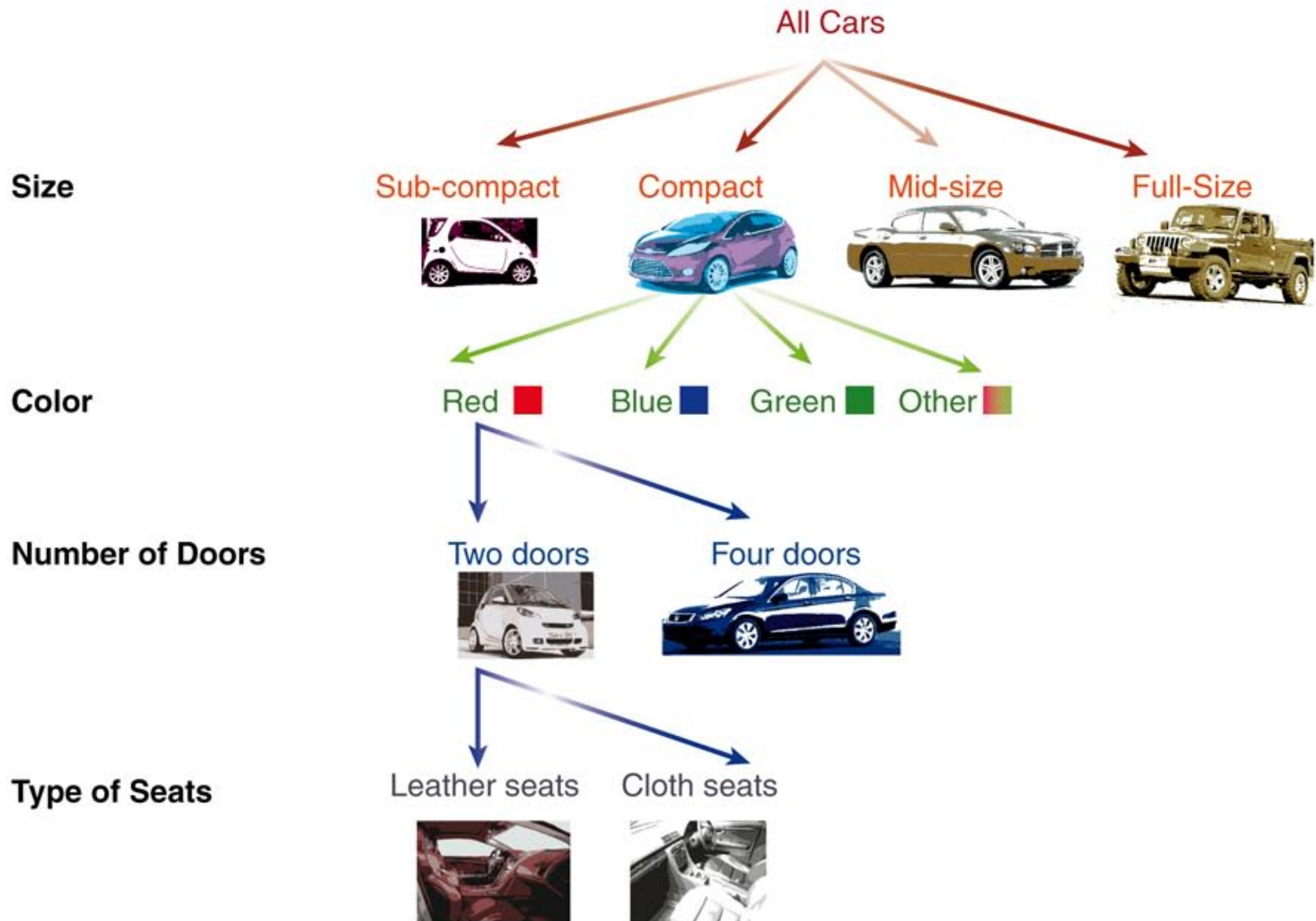
Taxinomie (taxonomie, taxonomy).

La **taxinomie** est la science de la **classification** des êtres vivants qui a pour objet de les **décrire** et de les **regrouper** en entités appelées taxons (familles, genres, espèces, etc.) afin de pouvoir les **nommer** et les **classer**.

Structurer, architecturer.



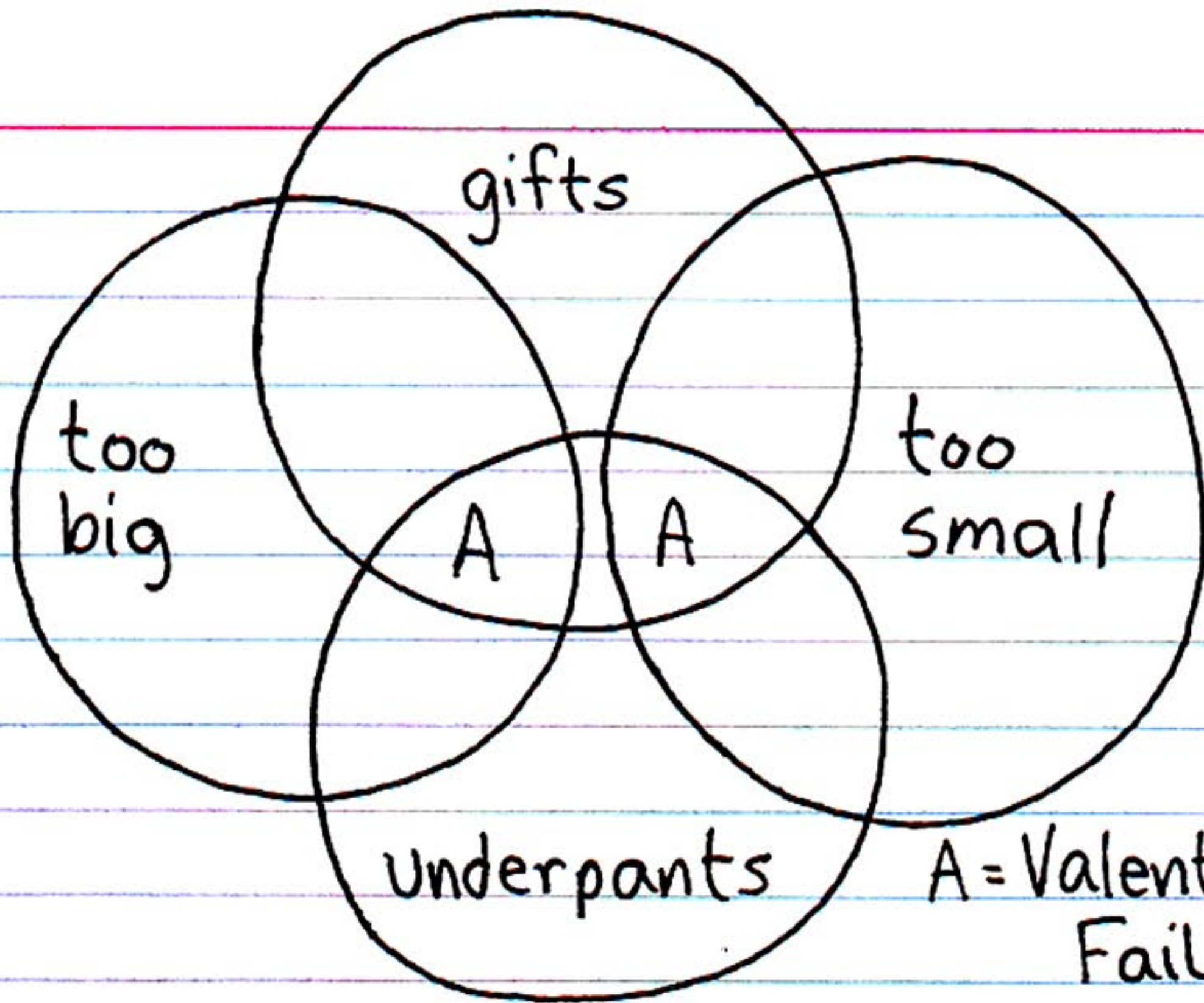
Hierarchial Classification of Cars

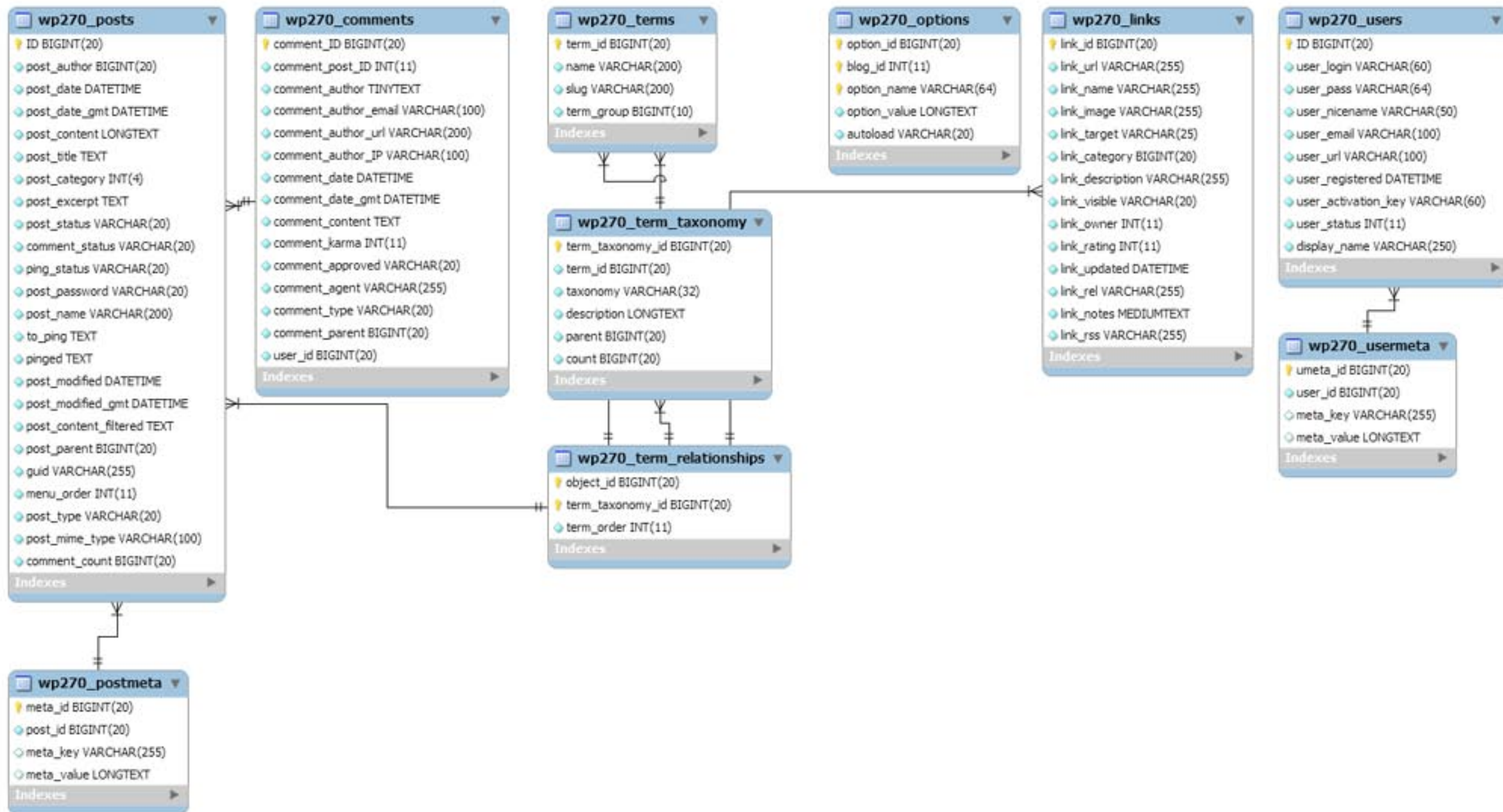


Clustering.

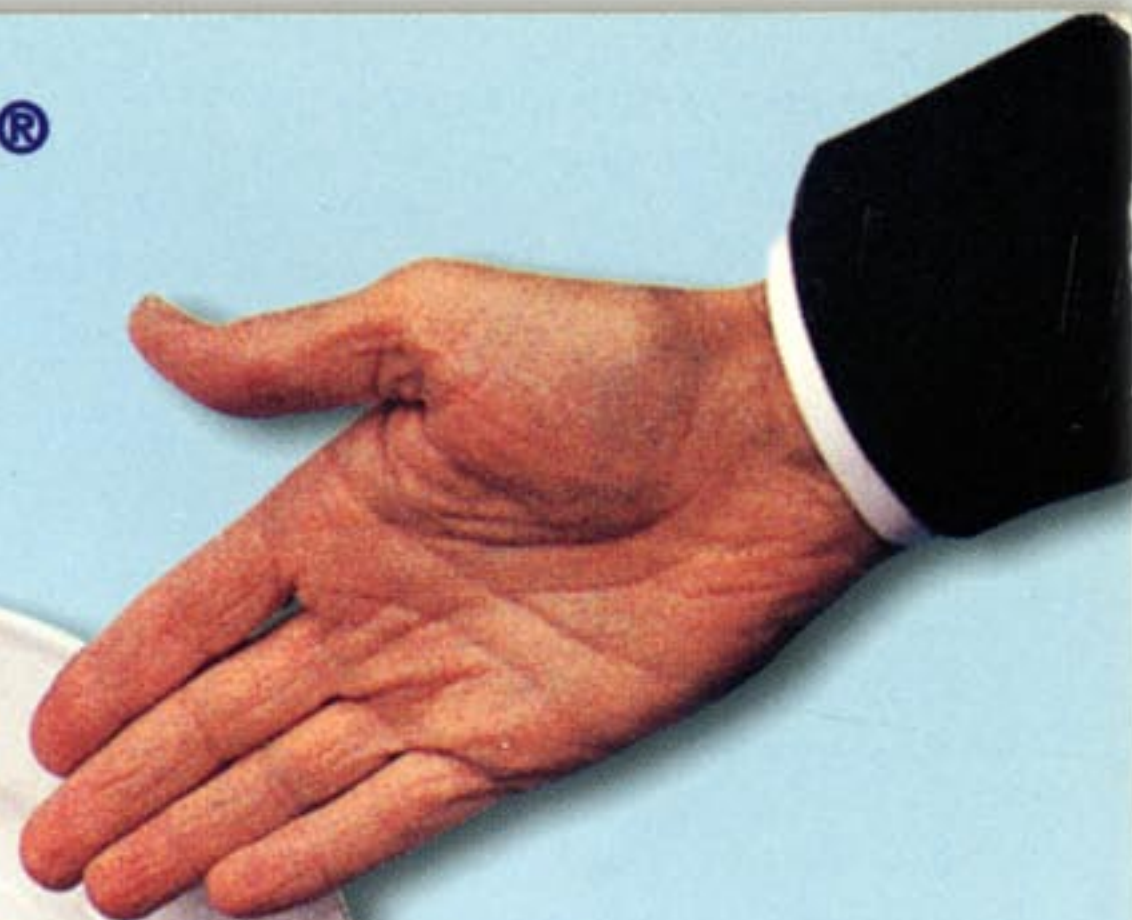
En analyse de données statistiques, le clustering (data clustering) décrit des méthodes de **classification de données** (méthode de regroupement hiérarchique ou méthode de partitionnement de données).







point it[®]



Traveller's
language
kit

Picture
dictionary

Graf Editions





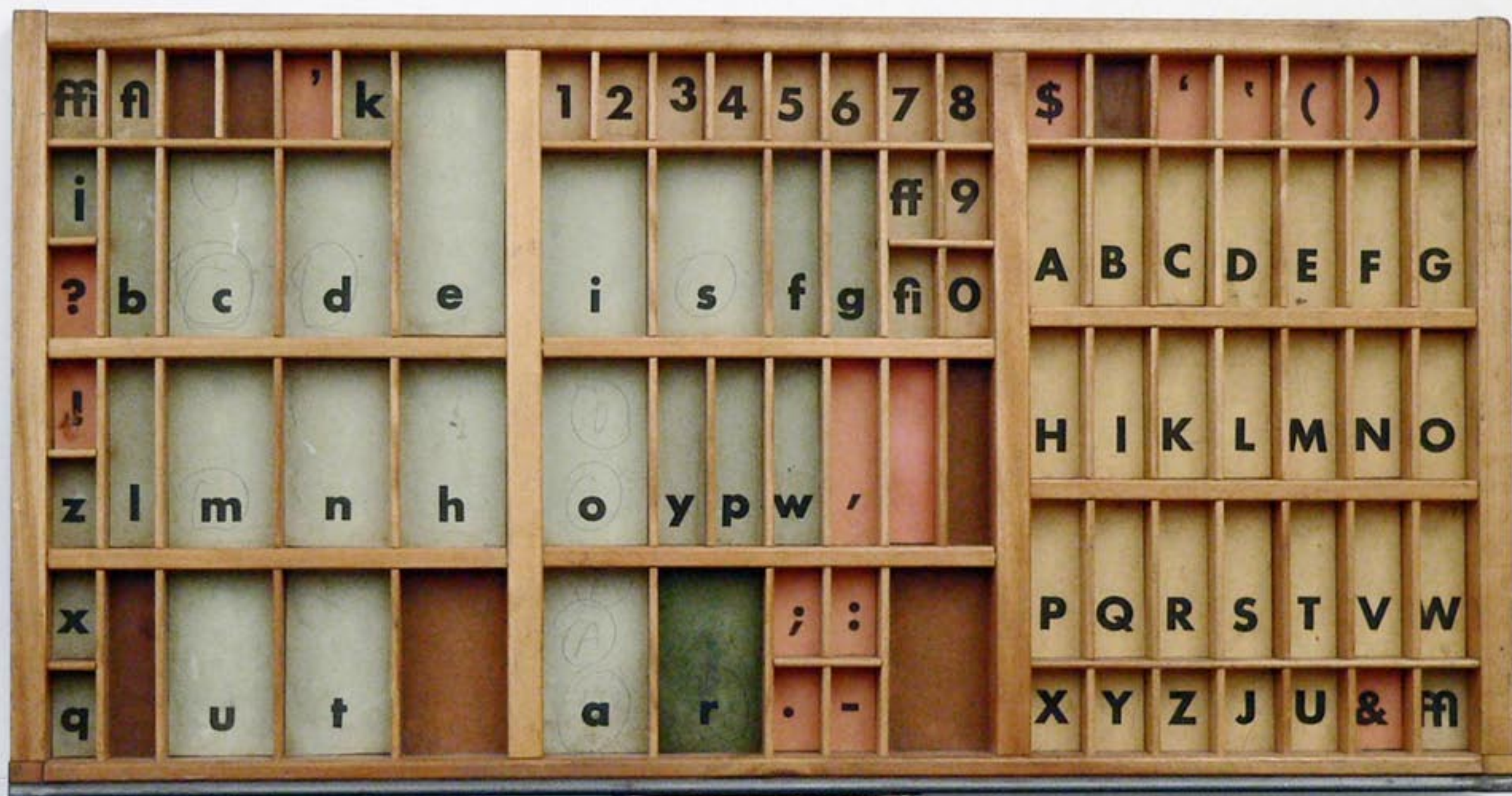


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Handwritten labels on drawers:

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Système de classification décimale universelle par Paul Otlet <http://www.multimedialab.be/blog/?p=1197>

SCHLAGWORTKATALOG

BAY - BEE

34 SCHLAGWORTKATALOG
BIBLIOGRAPH:N - BIBLIOTHEKEN:DD

BISM - BOD

SCHLAGWORTKATALOG

BEF - BERF

SCHLAGWORTKATALOG

SCHLAGWORTKATALOG

BUCHW - BUE

Bibliotheken:

Kataloge: Schlagwortkatalog

(Schleimer, Hans) über bibliothekarische Schlag-
wortkatalog. Mit Regeln f. die U.S. in Graz u. einen Anh.
Systematischer oder alphabetischer Sachkatalog?
(Leipzig: Harrassowitz, 1922)
Aus: Zentralblatt

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35 SCHLAGWORTKATALOG
BIBLIOTHEKEN:DE - BIBLIOTHEK:N

36 SCHLAGWORTKATALOG

BIBLIOTHEKEN:O - BIENENR

SCHLAGWORTKATALOG

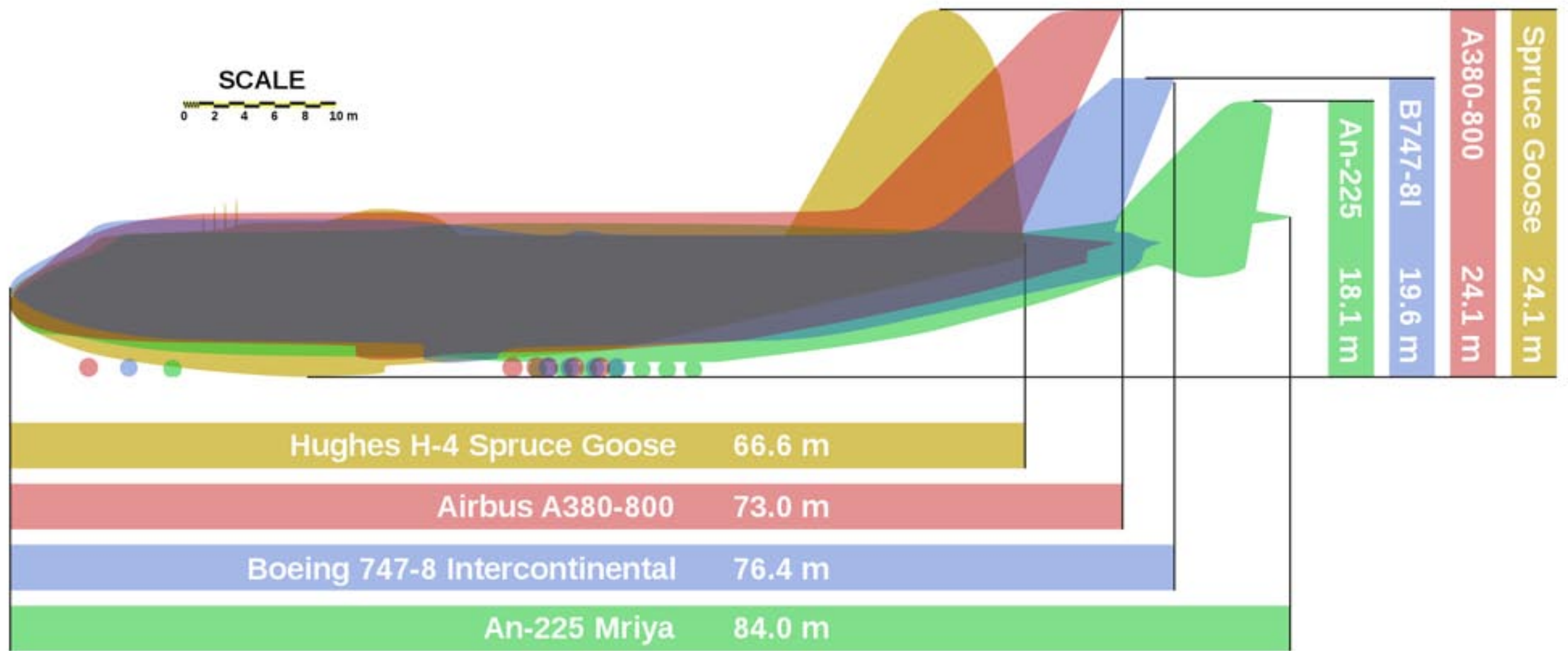
BERG - BERLIN:S

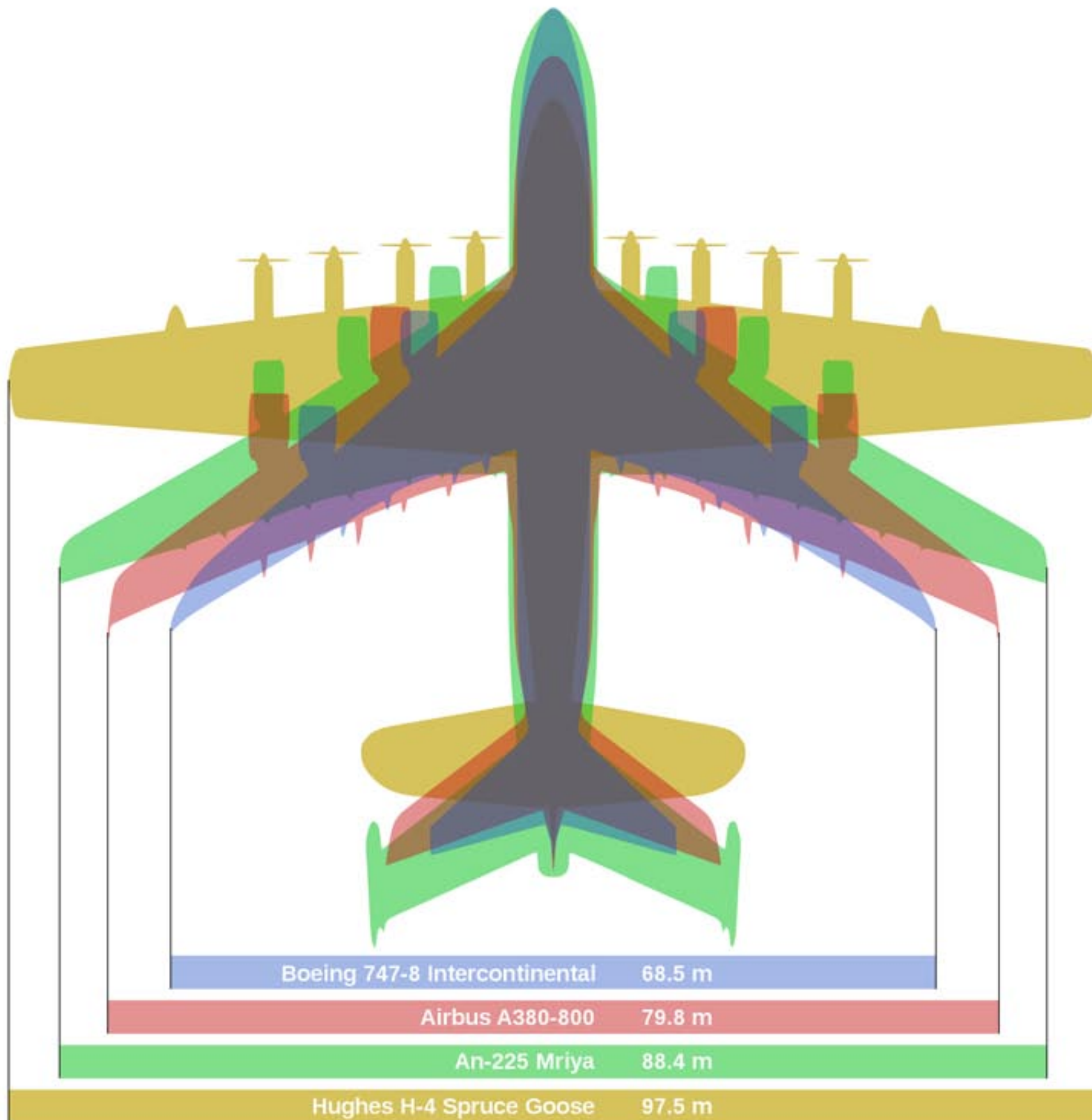


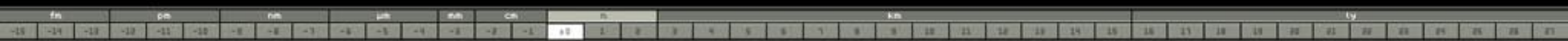
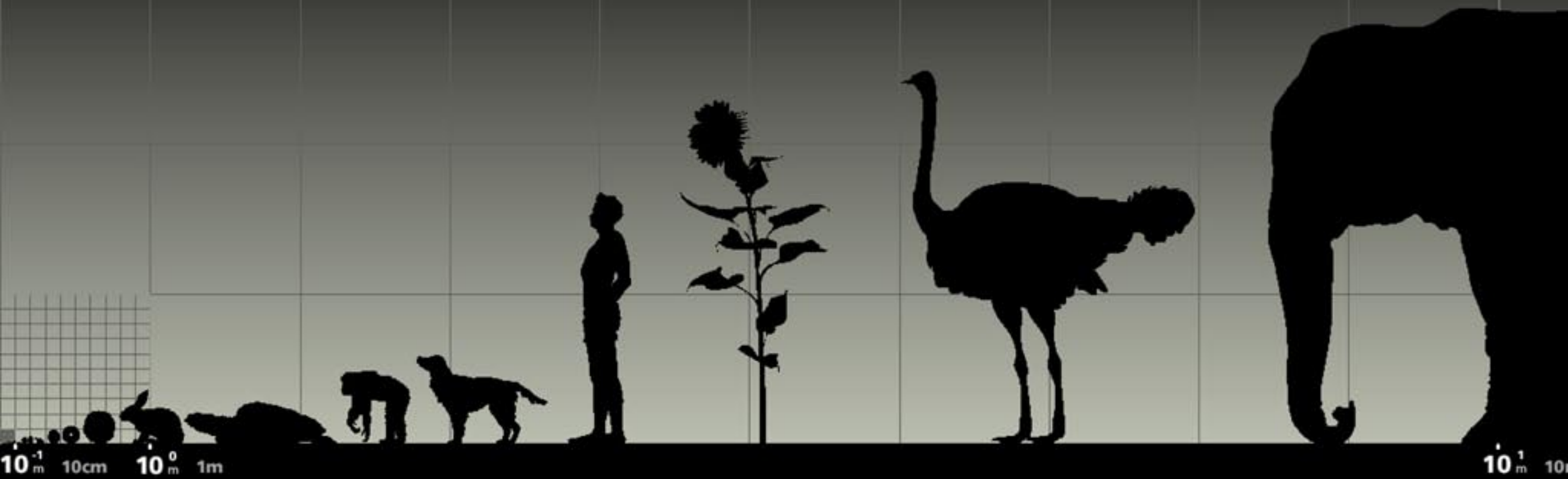
Graphisme fonctionnel.

Form follows function.

Louis Sullivan, The Tall Office Building Artistically Considered, Lippincott's Magazine, Philadelphia, 1896.



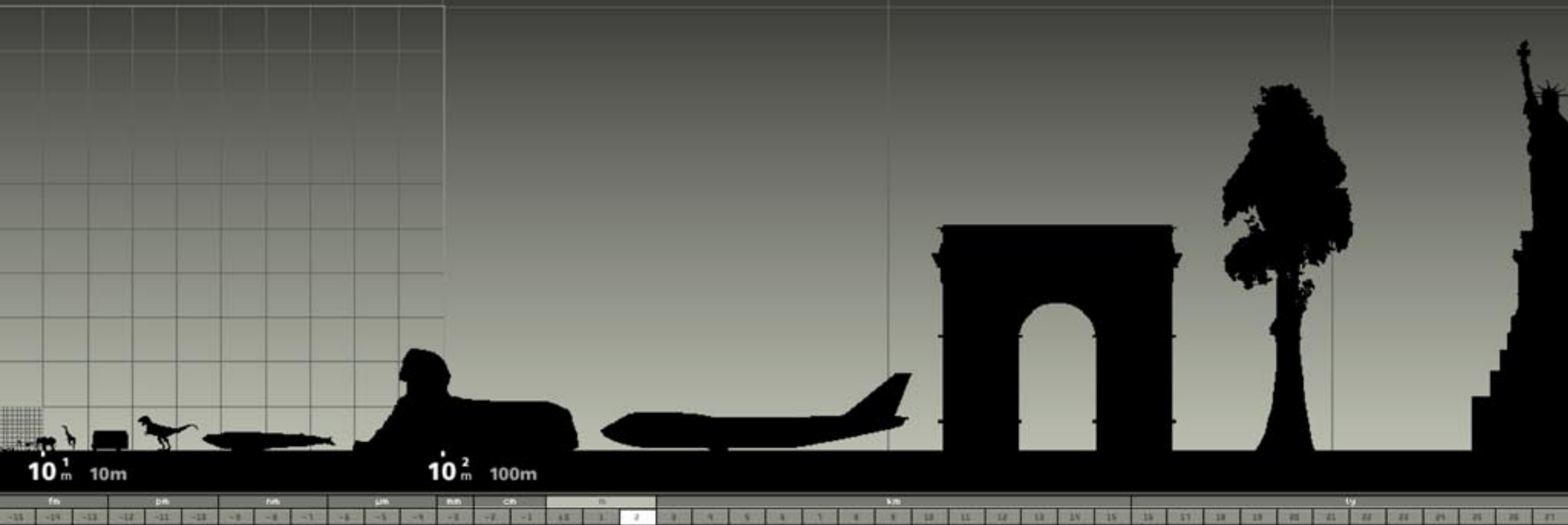




m The Unit that Measures the World

Meter

A base unit of length, defined as the length of the path travelled by light through absolute vacuum in 1/299,792,458 of a second.



m The Unit that Measures the World

Meter A base unit of length, defined as the length of the path travelled by light through absolute vacuum in 1/299,792,458 of a second.

Today's American soldier is the most lethal in U.S. history – with a destructive force over 332 times greater than a Revolutionary War soldier.

Source: Dupuy, *Evolution of Weapons and Warfare*, 1987

Equipping America's Fighting Man 1776–1999

Revolutionary War

Musket and support of one cannon per 750 men. Food for 2-3 days.



Civil War

Rifled musket and one cannon per 500 men. Hardtack biscuit, bacon and bread. Supplies for one week.



WWI

Bolt action, breech/magazine loading rifle, grenades, support of machine gun and artillery. Supplies from depots in rear areas.

WWII

Semi-automatic and automatic rifles, grenades, land mines, machine guns, medium and long-range artillery. Supplies for 3-5 days of combat. Close air support contributes to firepower.



1970

Automatic rifles, grenades, land mines, machine guns, medium and long-range artillery, rocket artillery, anti-tank guided missiles (ATGMs). Supplies for 2-3 days of intensive combat. Close air support contributes greatly to ground firepower.

1999

Automatic rifles, grenades, land mines, machine guns, artillery, airpower, ATGMs, smart munitions, Individual GPS navigational system, laser targeting systems,



Infantry Illustrations: Jeffery West

Armaments

The U.S. manufactures, stockpiles and distributes more armaments than any other country. Has it made us more secure?



The U.S. is the leading manufacturer and exporter of arms – 4 times greater than its next largest competitor.

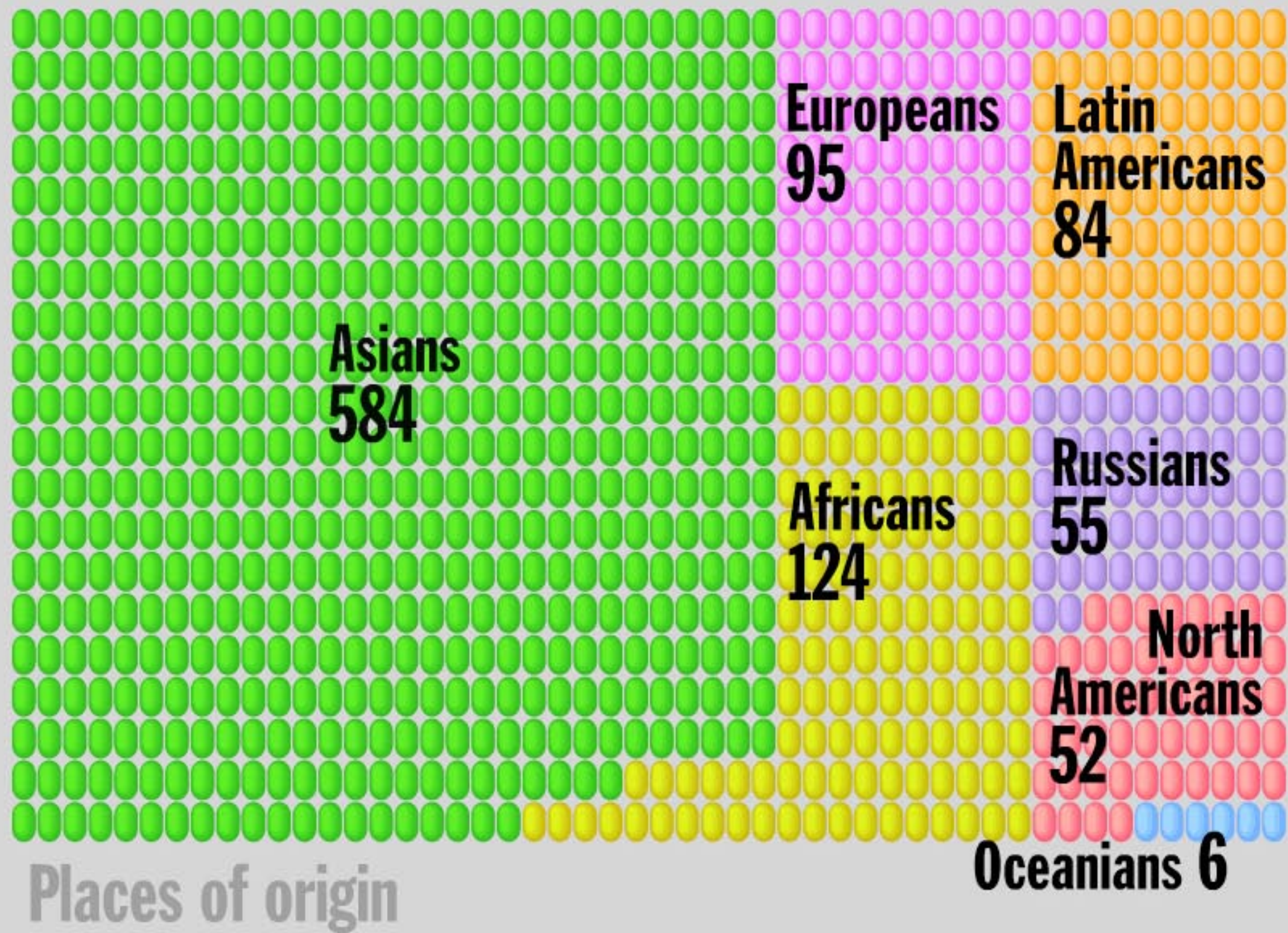
Top ten exporters of armaments worldwide



Top ten importers of armaments worldwide

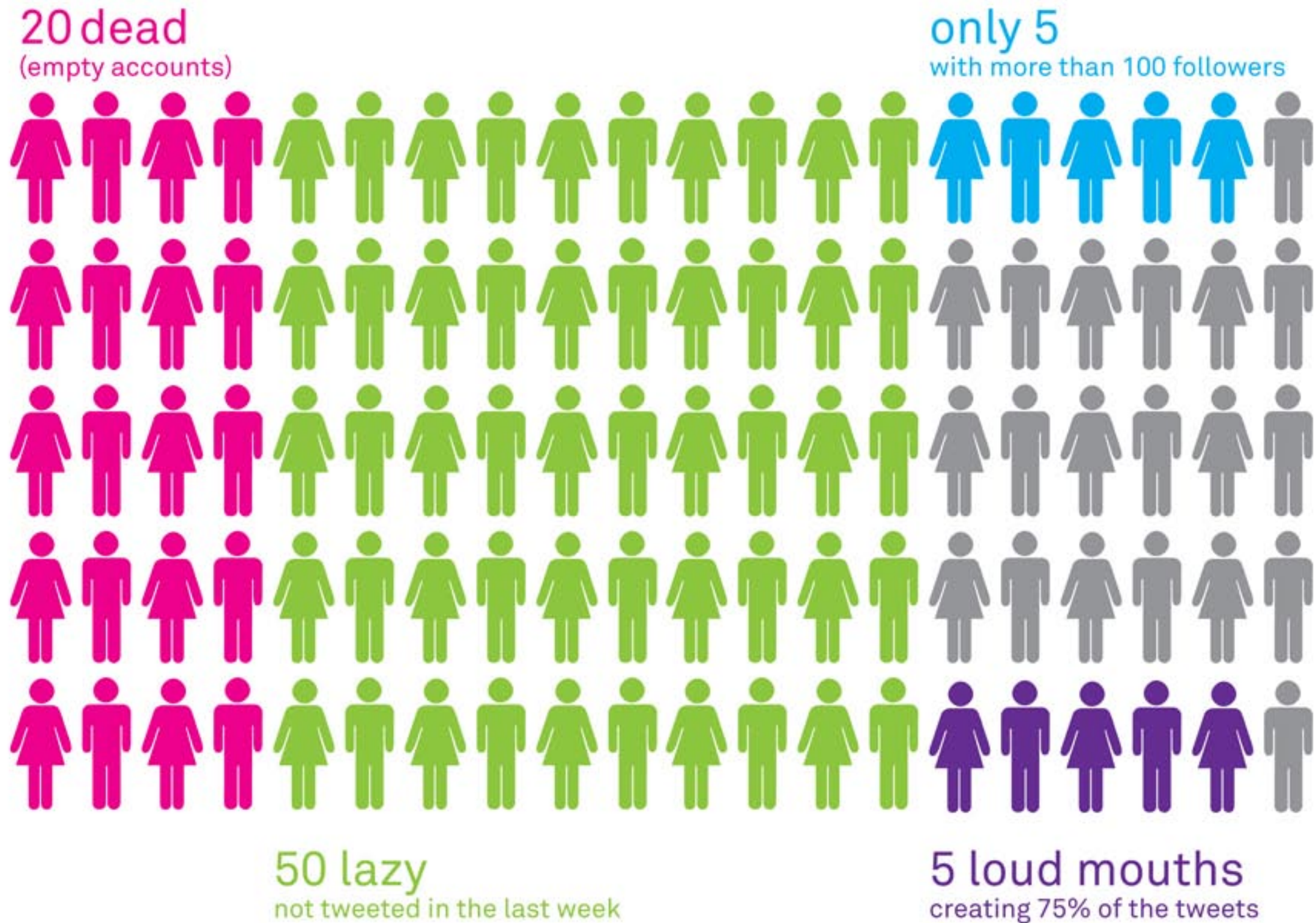


Source: U.S. States Department, *MMEA7* 1997



Let's Not Get Too Excited...

If the Twitter community was 100 people...



Map of the Market

Launch Map in Separate Window 

- Lowe's Cautious on Earnings View for Coming Year
- Singapore Sovereign Fund Cuts Stake in Citigroup
- Stock Screen: 3 Stocks With Fast Sales Growth



Patent No.: US 6,583,794 B1

The population of the United States

is not distributed evenly. Instead, we tend to bunch up in communities, leaving the spaces in between more sparsely inhabited. Most Americans live in or near cities; today 53 percent live in the 20 largest cities. 75 percent of all Americans live in metropolitan areas.

This map shows population density. The relative height of each major city reflects its population in 1990.

Source: U.S. Census Bureau

Go West. Nevada is the fastest growing state, followed by Arizona, Idaho, Colorado, and Utah.

Wyoming has the lowest population density of all states in the lower 48 with an average of five people per square mile.

What happens in the empty spaces? Some of it is farming country. More than one quarter of America's crop land is used to grow corn. One third of what is produced is exported to other countries.

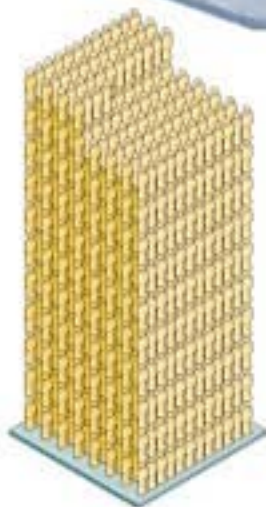
Chicago, the country's third largest city, has a population of about three million people. There are 21 states with populations smaller than this city.

Largest metropolitan area includes New York City and portions of New Jersey and Long Island with a total population of 20 million.

?

Population density is highest in New York City, where there are 23,000 people per square mile.

Approximately one in nine Americans lives in the nation's most populous state—California. More than 15 million people live in the Los Angeles, Riverside, and Orange County metropolitan area.



Distributing our population evenly would put an average of 76 people per square mile.

New Jersey is the most densely populated state with an average of more than 1,000 people per square mile.

Alaska is a sparsely populated state with an average of one person per square mile.

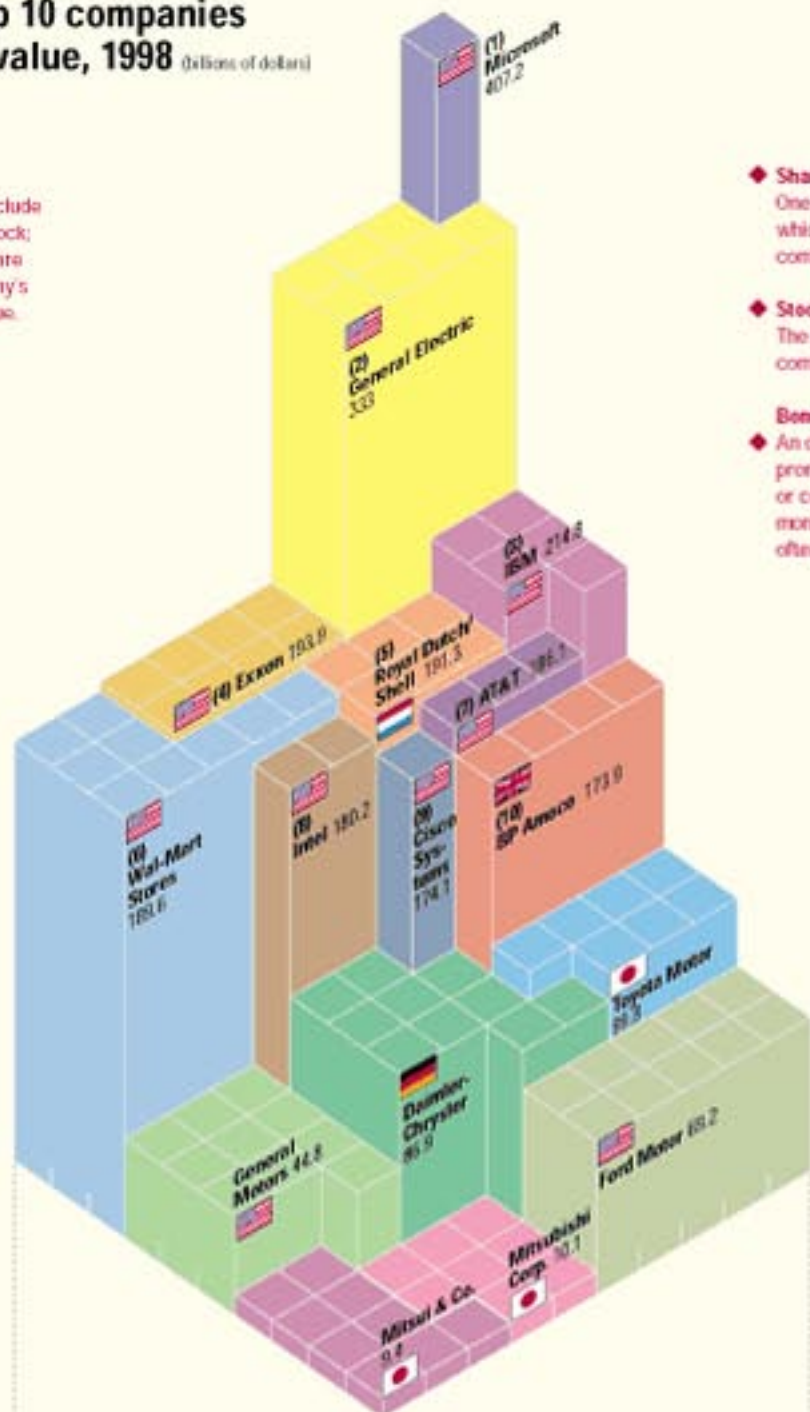
Wet. Some states are full of water. For example, Louisiana includes more than 8,000 square miles of lakes and wetlands. That's an area bigger than Connecticut and Rhode Island combined.

Coastal areas are home to more than half the U.S. population.

World's top 10 companies in market value, 1998 (billions of dollars)

Market value

Market value may include several classes of stock; price and yield data are based on the company's most widely held issue.



Share

One of the equal parts into which the ownership of a company is divided.

Stock

The number of shares that a company issues.

Bond

An official document promising that a government or company will pay back money that it has borrowed, often with interest.

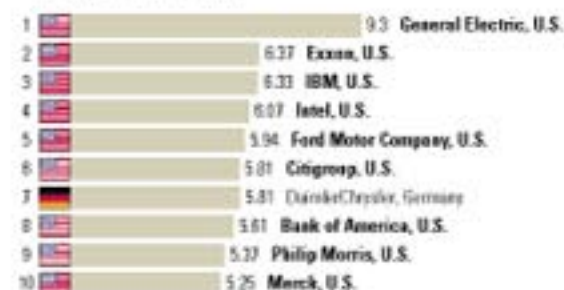
World's top 10 companies in sales, 1998 (billions of dollars)



Source: Morgan Stanley Capital International Inc., Standard & Poor's

World's top 10 companies by profits, share-price gain, return on equity, 1998

Profits (billions of dollars)



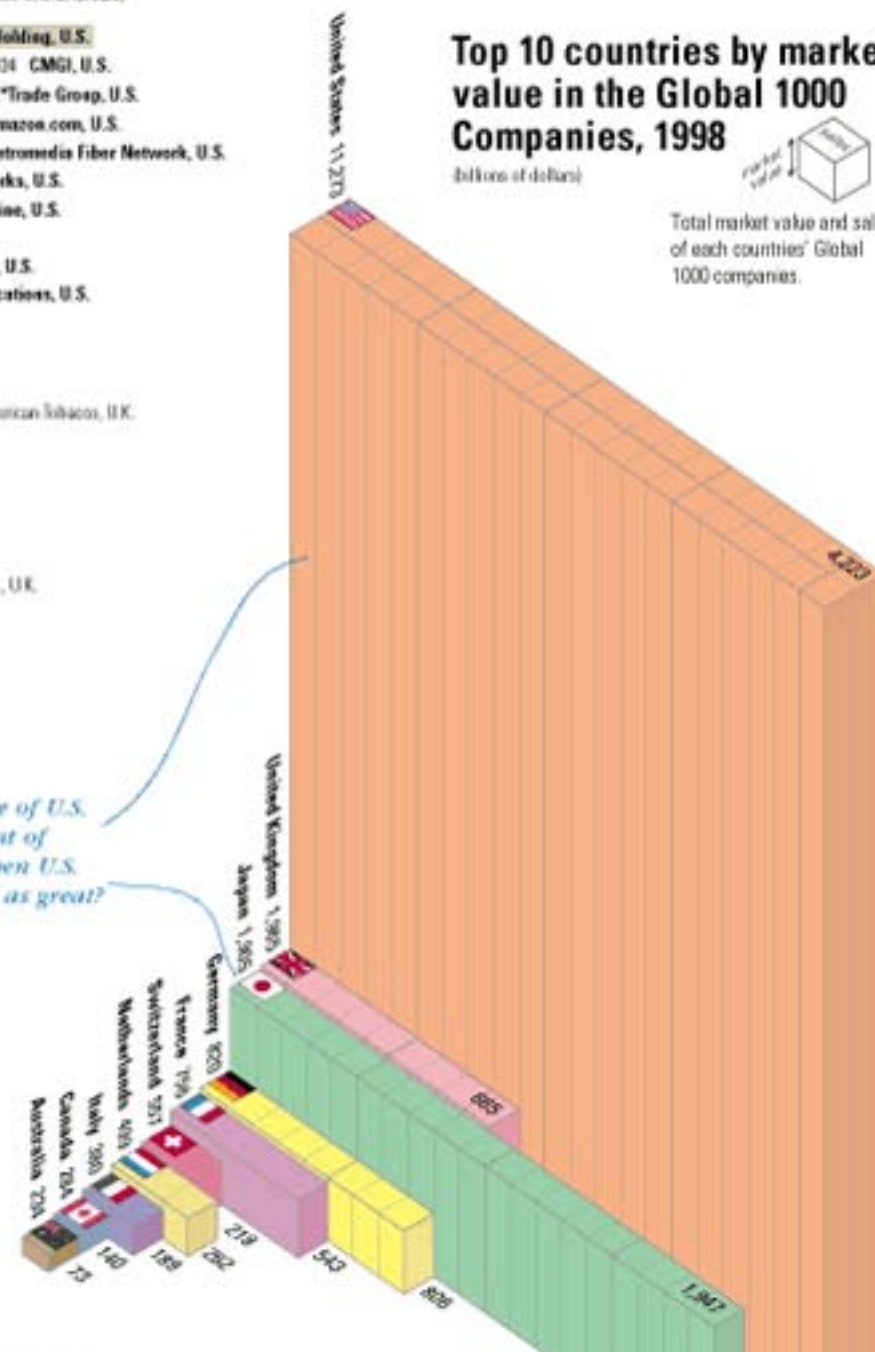
Share-price gain (% change from 1989 in U.S. dollars)



Return on equity (%)



Why is the market value of U.S. companies 5.9 times that of Japanese companies when U.S. sales are only 2.2 times as great?



Top Companies

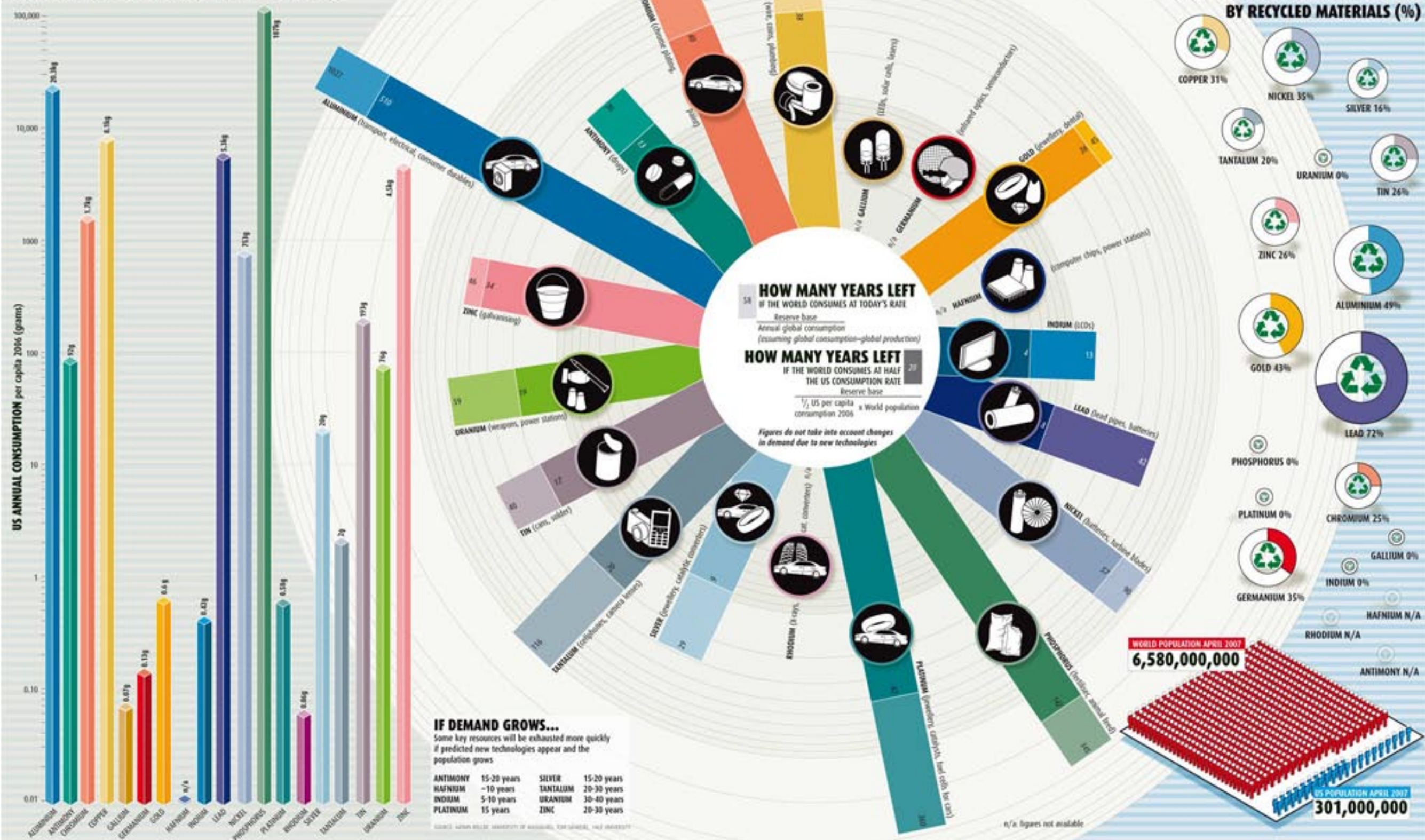
Has the computer business affected our world status?

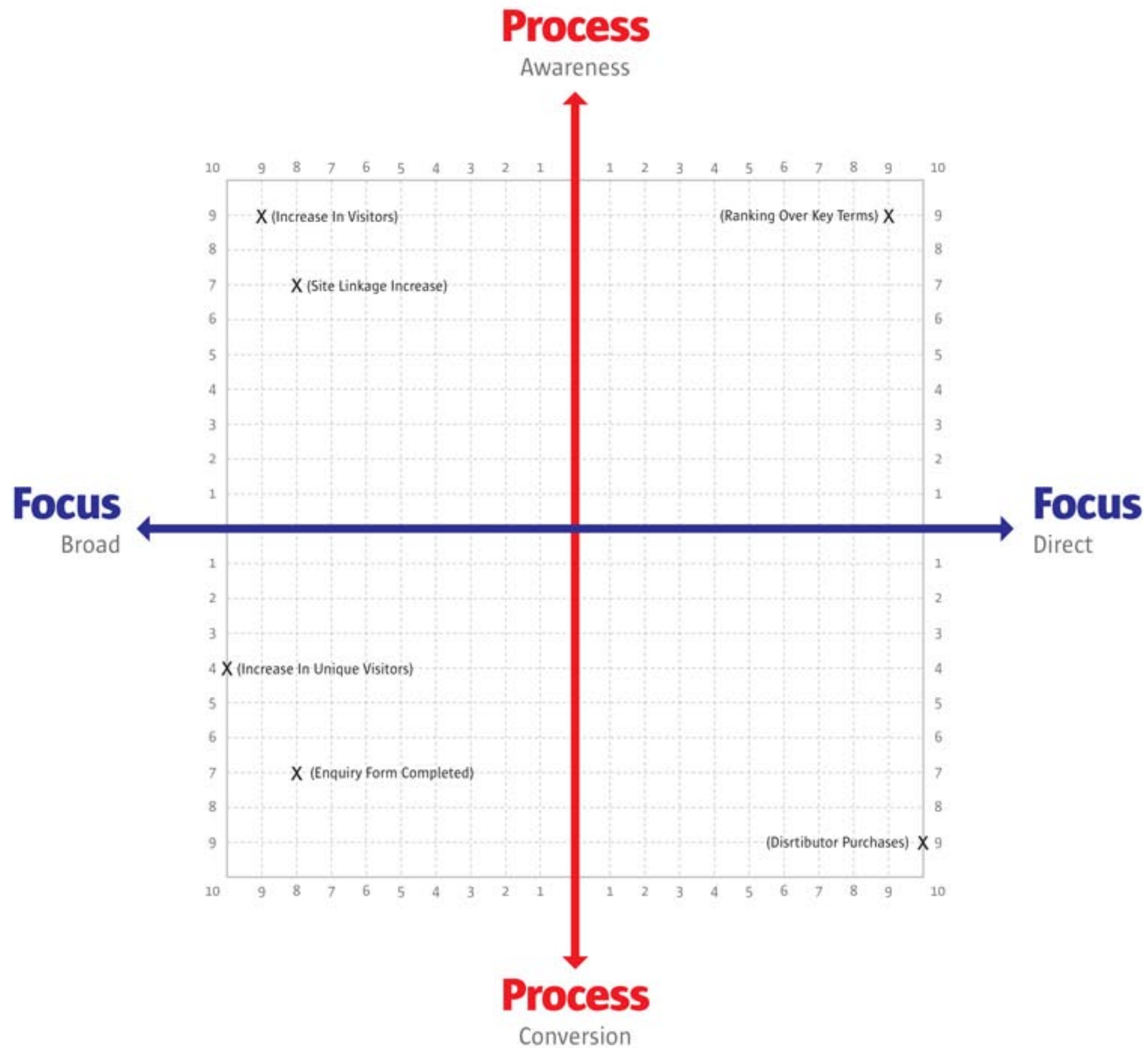


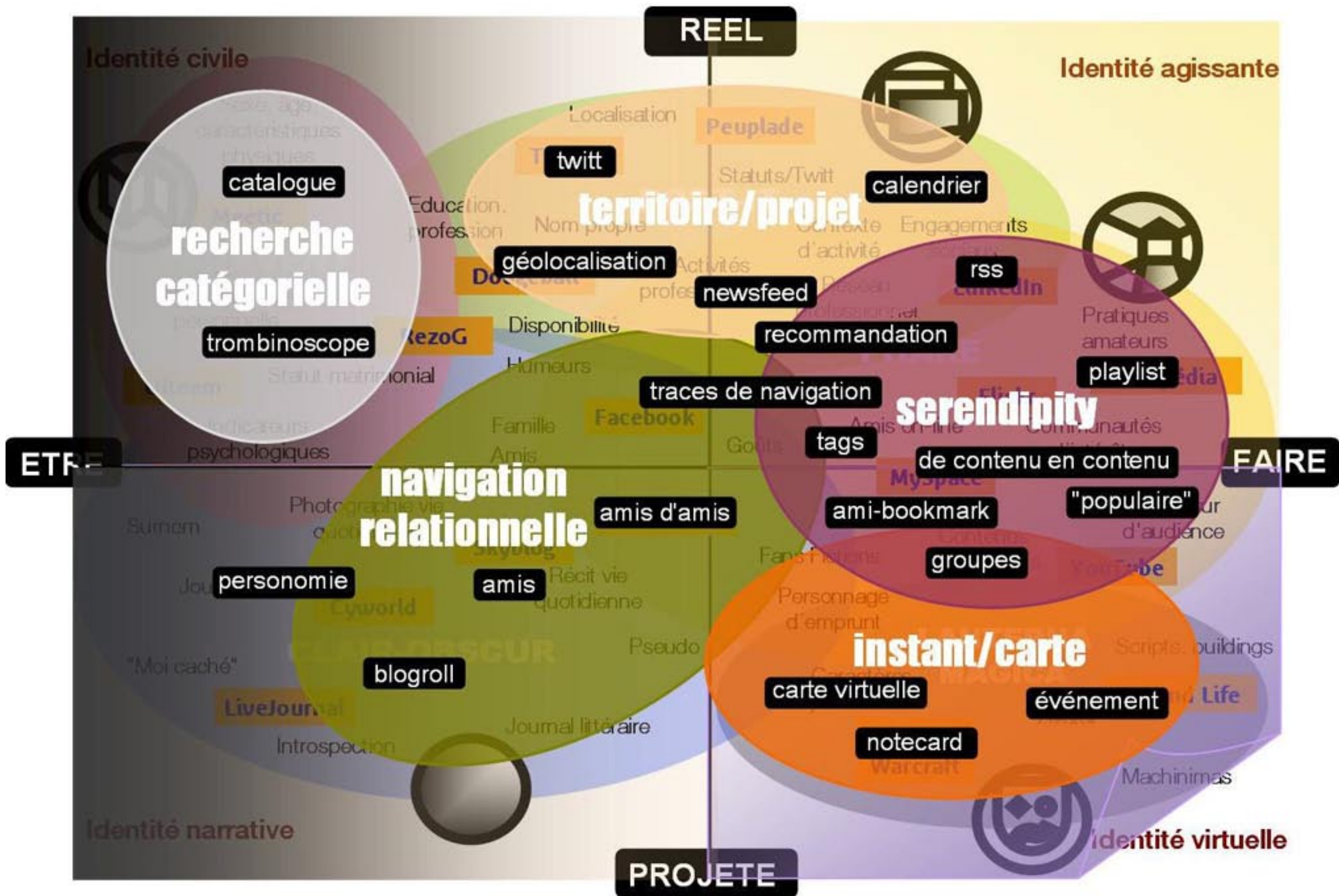
Top 10 countries by market value in the Global 1000 Companies, 1998 (billions of dollars)

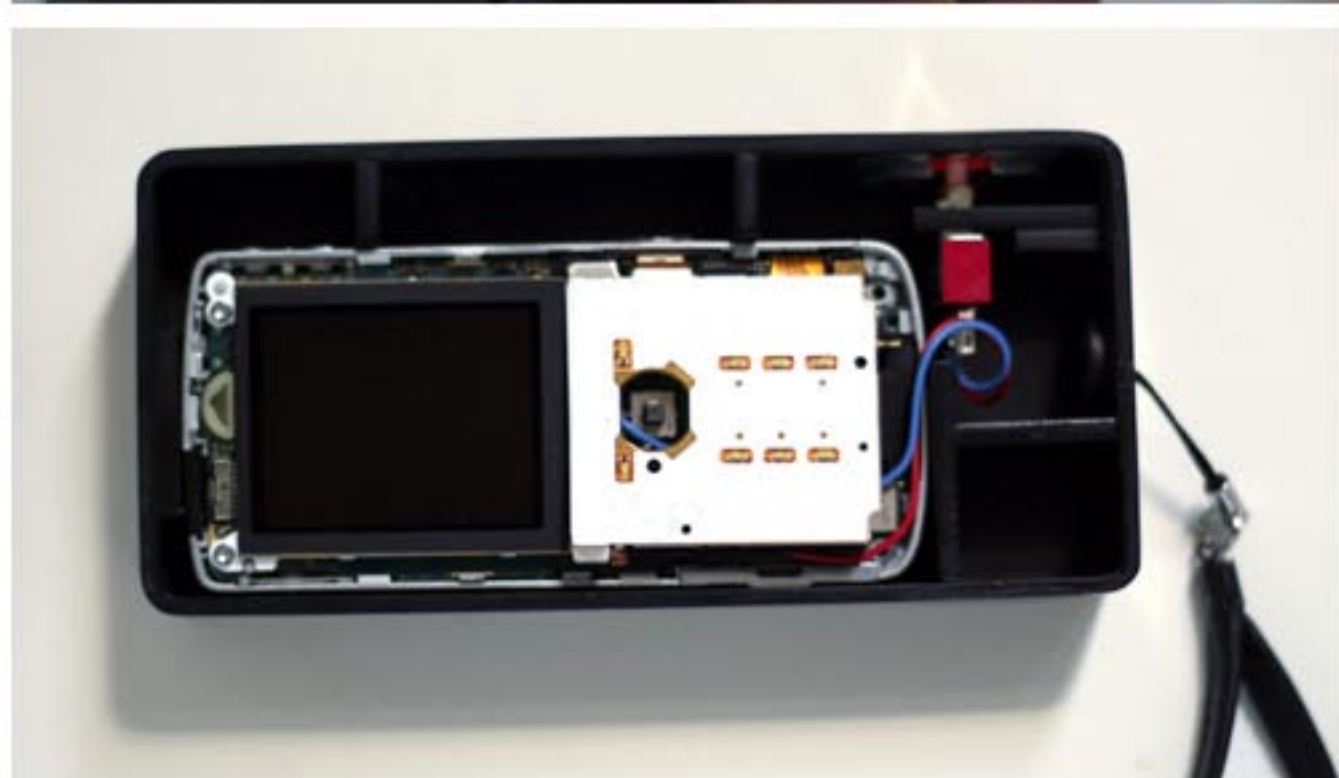
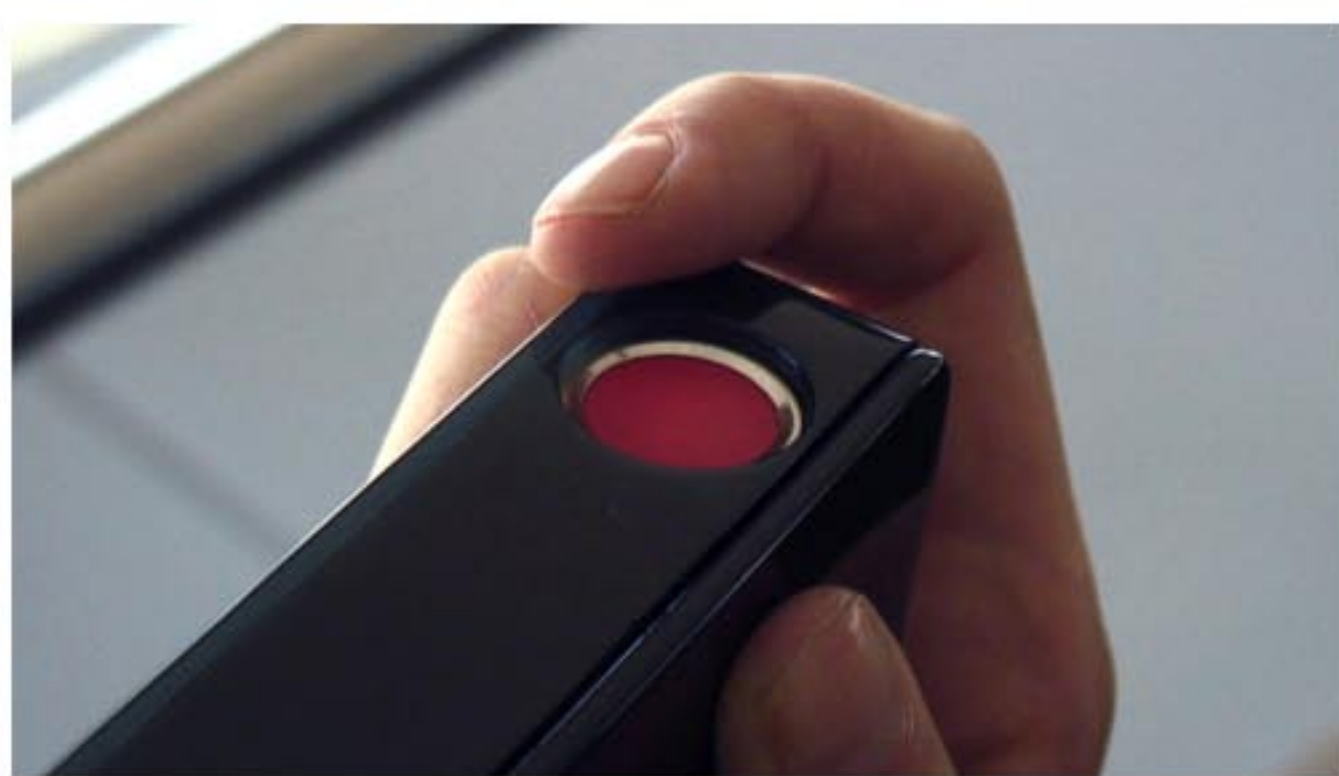
Total market value and sales of each country's Global 1000 companies.

HOW LONG WILL IT LAST?









flickr

Doors and Windows Experimental Colr Pickr - Jim Bumgardner



The App Garden

[Create an App](#) [API Documentation](#) [Feeds](#) [What is the App Garden?](#)

The Flickr API is available for non-commercial use by outside developers. Commercial use is possible by prior arrangement.

Read these first:

- [Overview](#)
- [Encoding](#)
- [User Authentication](#)
- [Dates](#)
- [Tags](#)
- [URLs](#)
- [Buddyicons](#)
- [Flickr APIs Terms of Use](#)

- [API Keys](#)
- [Developers' mailing list](#)

Photo Upload API

- [Uploading Photos](#)
- [Replacing Photos](#)
- [Example Request](#)
- [Asynchronous Uploading](#)

Request Formats

API Methods

activity

- [flickr.activity.userComments](#)
- [flickr.activity.userPhotos](#)

auth

- [flickr.auth.checkToken](#)
- [flickr.auth.getFrob](#)
- [flickr.auth.getFullToken](#)
- [flickr.auth.getToken](#)

blogs

- [flickr.blogs.getList](#)
- [flickr.blogs.getServices](#)
- [flickr.blogs.postPhoto](#)

collections

- [flickr.collections.getInfo](#)
- [flickr.collections.getTree](#)

commons

- [flickr.commons.getInstitutions](#)

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<http://www.worldchanging.com/book/>



Marc Wathieu, mars 2010.

<http://www.multimedialab.be/>

<http://www.multimedialab.be/doc/images/index.php?album=visualisation-information>

<http://delicious.com/marcwathieu/visualization>

<http://www.flickr.com/photos/marcwathieu/>