

**Science
Communication
Uni Basel
20.11.2025**



**Superdot Studio
Darjan Hil**

13.11.2025

Aufgabe – Teil 1



Abgabe: 19. November 2024, 11:55 (Mittag) Uhr via ADAM
Format: A4 quer exportiert als PDF aus Excel oder A5 handgeschrieben, gescannt als PNG / JPG

Teil 1: Datenextraktion (Tabelle 1)

Erstellt eine tabellarische Übersicht eurer 10 CV-Stationen.
Hinweis: Die Tabelle soll alle Daten aus eurem visuellen CV strukturiert erfassen.

Teil 2: GRANT-Klassifikation (Zeile bei Tabelle 1)

Fügt unter jede Spalte den entsprechenden GRANT-Datentyp hinzu.

Teil 3: Kategorisierung – Bins definieren (Tabelle 2)

Transformiert mindestens 3 Datendimensionen von GRANT zu Category (> C).
Definiert für jede gewählte Dimension sinnvolle Bins (Kategorien) und füllt die Tabelle aus.

- Anforderungen:
- Minimum 3 Dimensionen kategorisieren
 - Bins müssen logisch und begründet sein

Viel Spass bei der Aufgabe und beim Experimentieren! Kommt gut!

13.11.2025

Aufgabe – Teil 2 (neues Blatt)



Abgabe: 19. November 2024, 11:55 (Mittag) Uhr via ADAM
Format: A5 Hochformat, gut eingescannt!

Teil 2: Reflexions-Journal (Meta-Aufgabe)

Füllt das Journal während oder nach der Bearbeitung der Aufgabe aus.

Wählt eine Skalenbreite für alle eure Antworten:

- Option 1: 1-5 (1 = sehr niedrig/negativ, 5 = sehr hoch/positiv)
- Option 2: 1-10 (1 = sehr niedrig/negativ, 10 = sehr hoch/positiv)
- Option 3: etwas mit Smileys

Wichtig: Bleibt bei dieser Skala für alle folgenden Aufgaben im Semester!

Diese Fragen sind ein Vorschlag. Ihr könnt selbstverständlich 10 eigene Fragen erfinden, welche im Kontext passend sind.

Fragen zur Aufgabe

- Wie langweilig/kurzweilig war die Aufgabe? (1 = sehr langweilig, max = sehr kurzweilig)
- Wie lange hat sich die Aufgabe angefühlt? (geschätzte Zeit in Minuten)
- Tatsächliche Bearbeitungszeit: ___ Minuten

Fragen zu euch heute

- Allgemeines Wohlbefinden heute: ___
- Motivation für diesen Kurs: ___
- Motivation, zur Uni zu gehen: ___
- Müdigkeit: ___
- Hunger: ___

Kontext

- Wetter heute: (sonnig / bewölkt / regnerisch / Schnee / andere)
- Temperatur: ___ °C

Viel Spass bei der Aufgabe und beim Experimentieren! Kommt gut!



Vergleichende Visuelle Analyse / Gallery walk

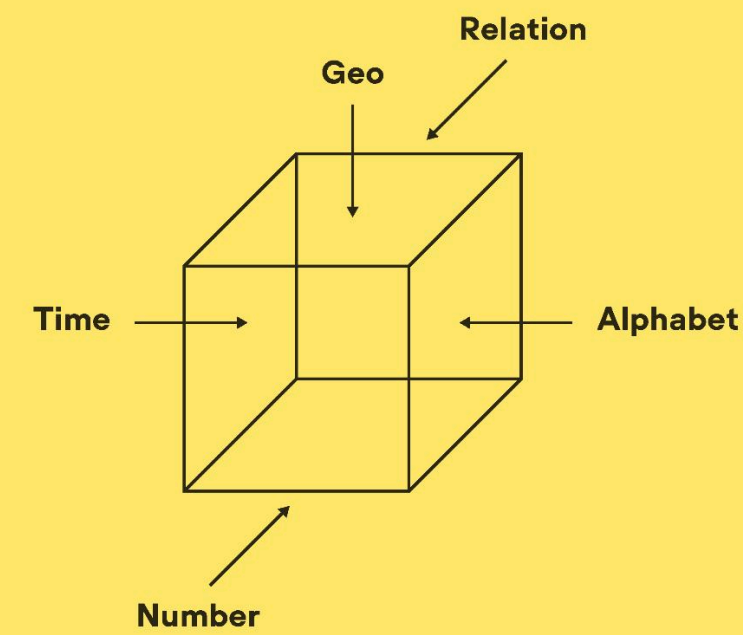


https://bit.ly/SciCom_v4

1. Auslegen als Galerie
2. Beobachten Freies, spontane Eindrücke sammeln
 - Was fällt sofort auf?
 - Wo bleibt der Blick hängen?
 - Welche Arbeiten stechen heraus?
3. Kriterien und Cluster, durch die Beobachtung entstehen Kategorien:
 - Welche Gemeinsamkeiten gibt es?
 - Nach welchen Merkmalen lassen sich Gruppen bilden?
 - Welche unterschiedlichen Ansätze sind erkennbar?
4. Gelungene Arbeiten extrahieren: Was macht diese Arbeiten wirksam?
5. Nicht gelungene Arbeiten extrahieren: Woran scheitern diese Arbeiten?
6. Mit andere Austauschen

Viel Spass bei der Aufgabe und beim Experimentieren! Kommt gut!

G.R.A.N.T.



Each side of the data cube can be viewed from a fundamentally different perspective. Interviewing the data also means to understand the inherent nature of each data dimension, revealing the natural organizing principles that might not be immediately obvious. In general according to Richard Saul Wurman information can be organised based on his **L.A.T.C.H.** theory to five fundamental data types. Through our practice we have developed an enhanced framework that addresses limitations of the original model while expanding its applicability to modern data visualization challenges. We call it **G.R.A.N.T** and it supports the data cube metaphor by providing fundamental ways to "rotate the cube" and view the data from different angles. It creates a natural bridge between how we organize data analytically and how we might visualize it. Each organization principle suggests different visualization approaches that are appropriate for that type of data.

Each **G.R.A.N.T.** data type suggests different analytical approaches:

G.eolocation
data can be mapped, clustered by proximity, or analyzed for spatial patterns

R.elation
data can be visualized as networks, hierarchies, or connection matrices

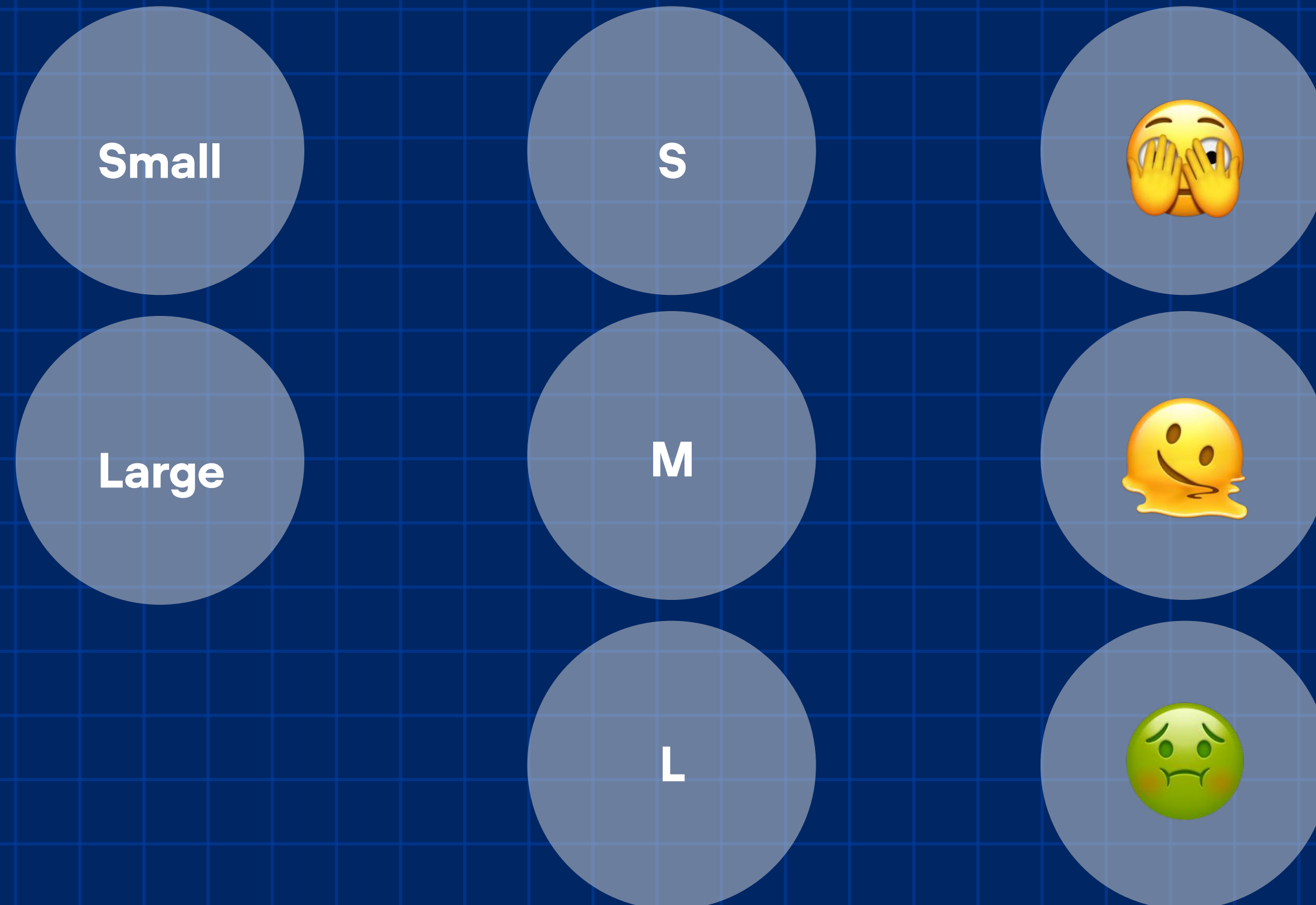
A.lphabetical
data can be sorted lexically, grouped semantically, or analyzed linguistically

N.umerical
data can be ranked, compared, aggregated, or statistically analyzed

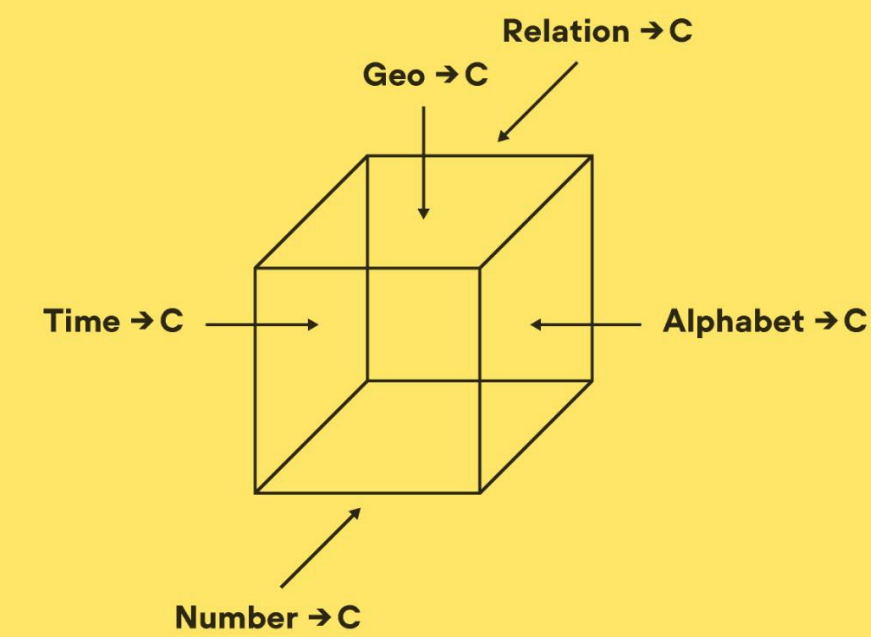
T.ime
data can be sequenced, periodized, or examined for temporal patterns

Family name	First name	Place of birth	Year of birth	Home town	Year of death	Gender	Generation	Relocation	Age at death	Children
Wagner	Hermann	Vienna	1871	Vienna	1961	M	1	N	90	Otto, Paul
Wagner (Moser)	Emma	Vienna	1875	Vienna	1960	F	1	N	85	Otto, Paul
Brown (Durand)	Marie	Paris	1879	Paris	1951	F	1	N	72	Anna, Elisabeth
Brown	James	London	1882	Paris	1947	M	1	Y	65	Anna, Elisabeth
Wagner	Otto	Vienna	1901	Munich	1924	M	2	Y	23	no
Brown	Anna	London	1913	London	1996	F	2	N	83	no
Wagner	Paul	Vienna	1914	Vienna	2011	M	2	N	97	Hermann, Marie
Wagner (Brown)	Elisabeth	Paris	1915	Paris	2014	F	2	N	99	Hermann, Marie
Wagner	Hermann Jr.	Paris	1935	Vienna	1987	M	3	Y	52	no
Wagner	Marie Jr.	Paris	1942	London	2020	F	3	Y	78	no
Alphabet	Alphabet	Alphabet	Number	Alphabet	Number				Number	Alphabet
		Geo	Time	Geo	Time					Relation

Bins definieren



G.R.A.N.T. → C®



The **G.R.A.N.T.** model is complete, once the letter **C** is added. **C** stands for "**category**" and is recognizing that all five data types can converge into categories. This convergence, represented by the directional symbol (→), points to the ultimate transformation that makes data more accessible, understandable, and visualizable.

Categories represent one of the most powerful conceptual tools in information design. While raw data in its original form (whether geolocation, network relationships, alphabetical text, numerical values, or timestamps) contains the complete information, categorical transformations make this information easier to compare and more suitable for visual playful encoding.

The transformation into categories is not a simplification that loses information, but makes information more accessible. The ability to recognize when and how to create meaningful categories from any data type represents a fundamental skill in information design.

Each **G.R.A.N.T.** data type converges to categories: **G.R.A.N.T. → C** ©

G.eolocation → C.ategories
Spatial data can be transformed into categorical groups such as geographic regions

R.elation → C.ategories
Connection data can be categorized by e.g. relationship type. (parents, children)

A.lphabet → C.ategories
Textual data can be grouped into e.g. name groups or alphabetical ranges (A–D, E–H)

N.umber → C.ategories
Quantitative data can be grouped into e.g. value ranges (low, medium, high)

T.ime → C.ategories
Temporal data can be categorized into e.g. periods and eras (19th century)

Family name	First name	Place of birth	Year of birth	Home town	Year of death	Gender	Generation	Relocation	Age group	Children
Wagner	Hermann	Vienna	1850–1899	Vienna	1950–1999	M	1	N	>85	Otto, Paul
Wagner	Emma	Vienna	1850–1899	Vienna	1950–1999	F	1	N	70–85	Otto, Paul
Brown	Marie	Paris	1850–1899	Paris	1950–1999	F	1	N	70–85	Anna, Elisabeth
Brown	James	London	1850–1899	Paris	1900–1949	M	1	Y	<70	Anna, Elisabeth
Wagner	Otto	Vienna	1900–1949	Munich	1900–1949	M	2	Y	<70	no
Brown	Anna	London	1900–1949	London	1950–1999	F	2	N	70–85	no
Wagner	Paul	Vienna	1900–1949	Vienna	2000–2049	M	2	N	>85	Hermann, Marie
Wagner	Elisabeth	Paris	1900–1949	Paris	2000–2049	F	2	N	>85	Hermann, Marie
Wagner	Hermann Jr.	Paris	1900–1949	Vienna	1950–1999	M	3	Y	<70	no
Wagner	Marie Jr.	Paris	1900–1949	London	2000–2049	F	3	Y	70–85	no
Category	Category	Category	Category	Category	Category	Category	Category	Category	Category	Category

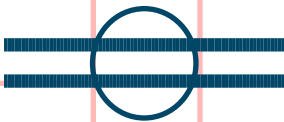
Potential von Kategorisierung

Eines der wichtigsten Werkzeuge im Informationsdesign ist Kategorisierung.

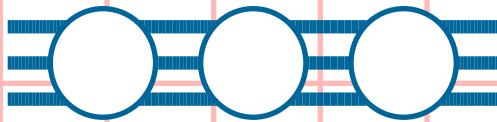
Es auch die grösste Gefahr für Manipulation und Pauschalisierung.

HSLU Think 3 – Inselstaaten Afrika – Diana Grab

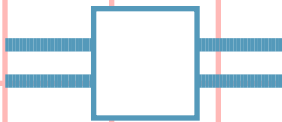
Mauritius



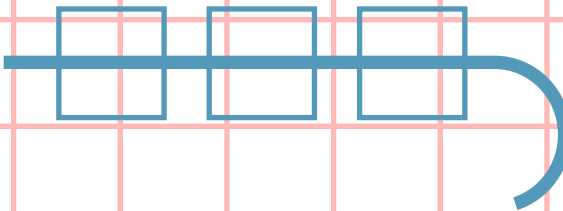
Comoros



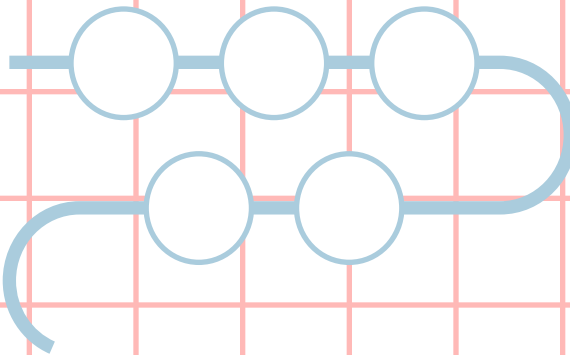
São Tomé and Príncipe



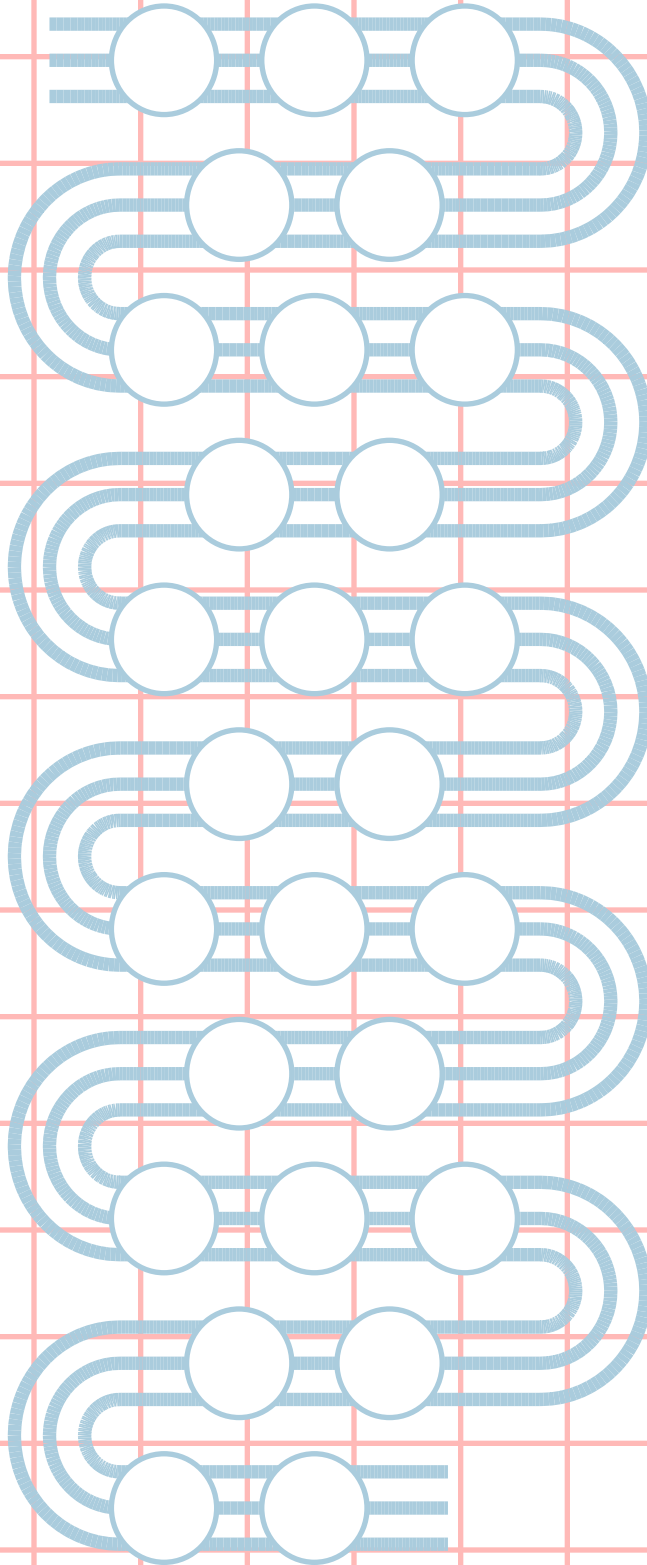
Seychelles



Cabo Verde



Madagascar



Reset

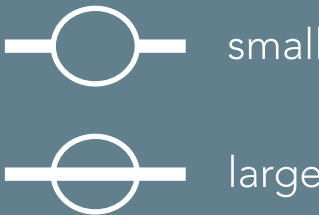
Fläche Wald



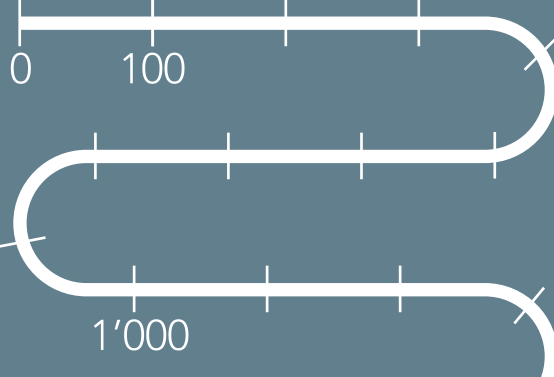
Fläche Landwirtschaft



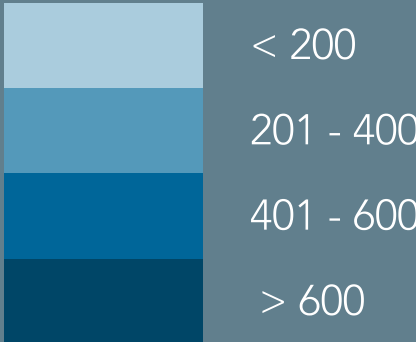
Bruttoinlandprodukt



Länge Küste










Bevölkerungsdichte



Jon Snow – Colera Epidemie 1854



When is going to be what?

30.10.2025	Why do we visualize?	
06.11.2025	Structured content	
13.11.2025	Content dimensions and categorization	
20.11.2025	Networks and relationships	
27.11.2025	The identity of a dot	
04.12.2025	Visual language and cultural context	
11.12.2025	Areas and hierarchies	

20.11.2025

Aufgabe – Teil 1



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Visueller CV (Hauptaufgabe)

Erstellt einen visuellen CV mit 10 Etappen aus eurem Leben.
Der Zeitrahmen ist frei wählbar – ihr entscheidet, welche Positionen für euch bedeutend sind.

Jede Position muss folgende 6 Datendimensionen enthalten:

WO: Ort (Stadt/Land) oder Institution/Organisation

WAS: Tätigkeit/Funktion (kurz)

Start: Startdatum (Monat/Jahr ausreichend)

Dauer: Dauer in Monaten

Joy Index: Zufriedenheit/Freude während dieser Zeit

Kategorie: Work, Education, Holidays, Hobby

Formale Anforderungen

- Format: A5, Hochformat
- Material: Ausgeteiltes Papier + 2 Farbstifte (nur diese 2 Farben verwenden)
- Legende: Pflicht – erklärt alle verwendeten visuellen Überlegungen
- Visualisierung: Freie Wahl der visuellen Form
- Abgabe: Eingescannt (Scanner oder Scan-App mit guter Qualität)
- WICHTIG: wenn ihr mehr Anläufe gebraucht habt, bitte alle scannen und abgeben (Prozess)

Viel Spass bei der Aufgabe und beim Experimentieren! Kommt gut!

20.11.2025

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Viel Spass bei der Aufgabe und beim Experimentieren! Kommt gut!

Modular Information Design System



Data
Dimensions

+



Diagrammatical
Dimensions
(1/25)

+



Visual
Dimensions
(40)

+



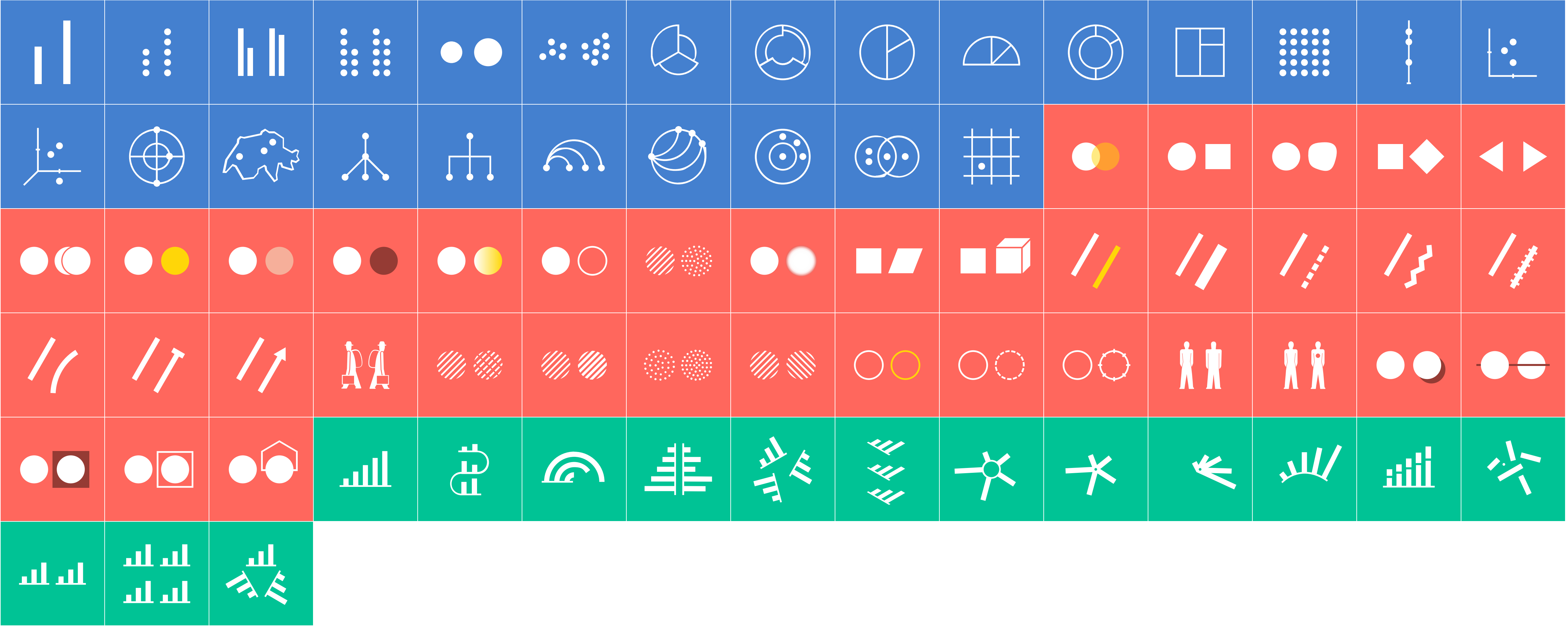
Structuring
Dimensions
(15)

=

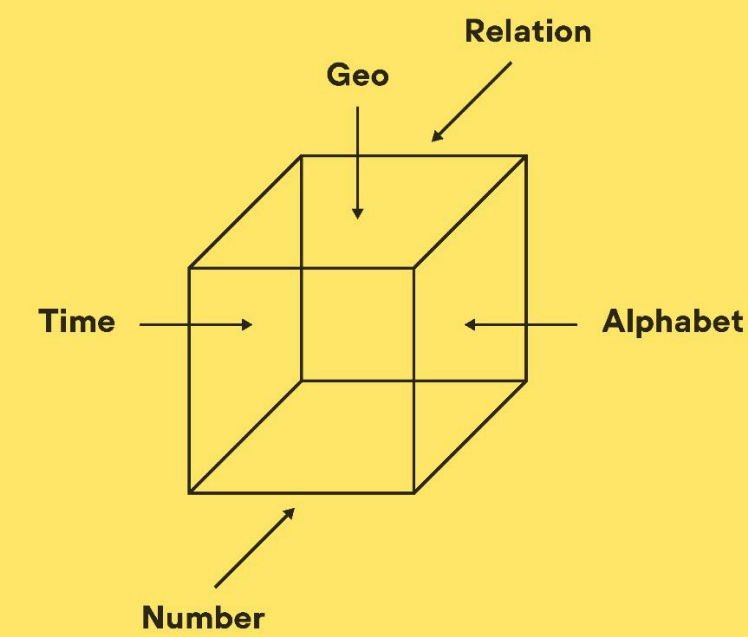


Multidimensional
Visualizations

Modular Information Design Elements



G.R.A.N.T.



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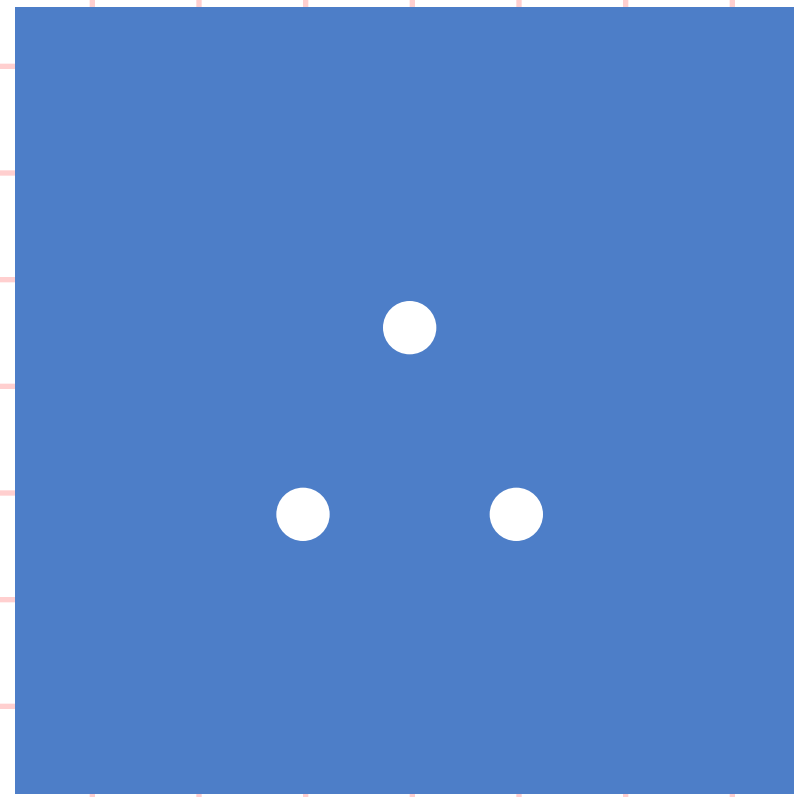
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Wagner	Marie Jr.	Paris	1942	London	2020	F	3	Y	78	no
Alphabet	Alphabet	Alphabet	Number	Alphabet	Number				Number	Alphabet
		Geo	Time	Geo	Time					Relation

Klassifizierung der Datentypen

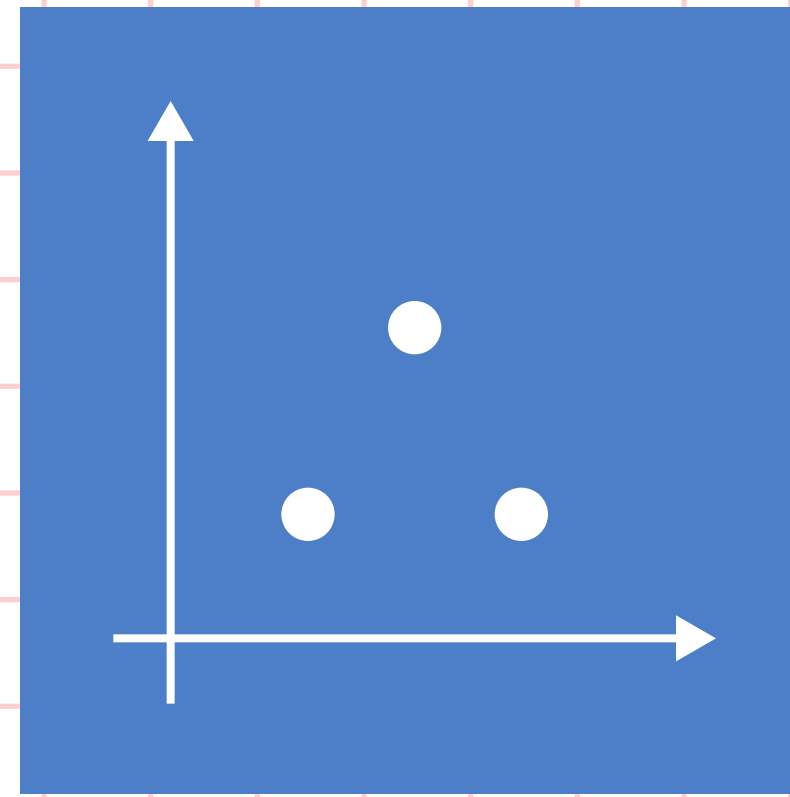
G.R.A.N.T.

Geolocation
Relation
Alphabet
Number
Time

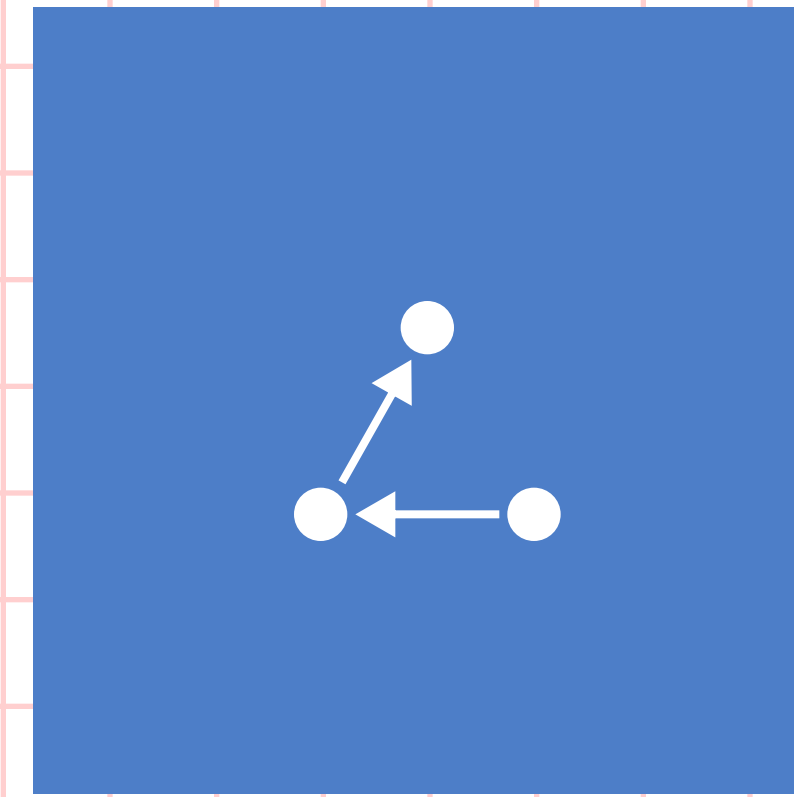
Diagram groups + G.R.A.N.T



2A
Quantity









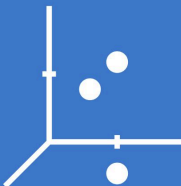


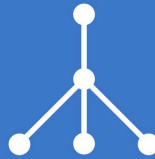


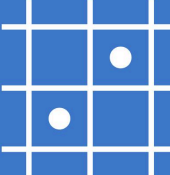
2B
Position



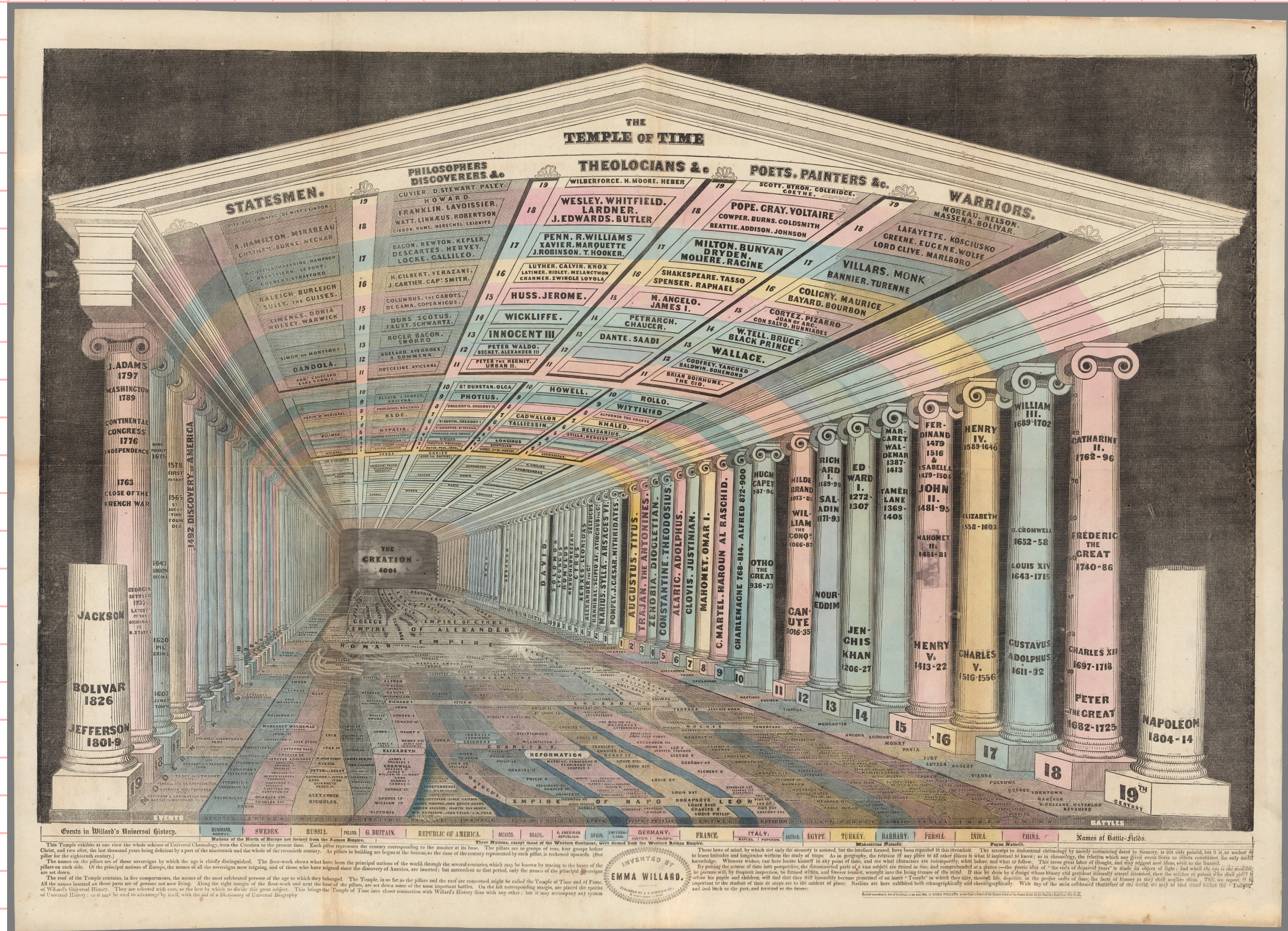
2C
Relation

Modular Information Design

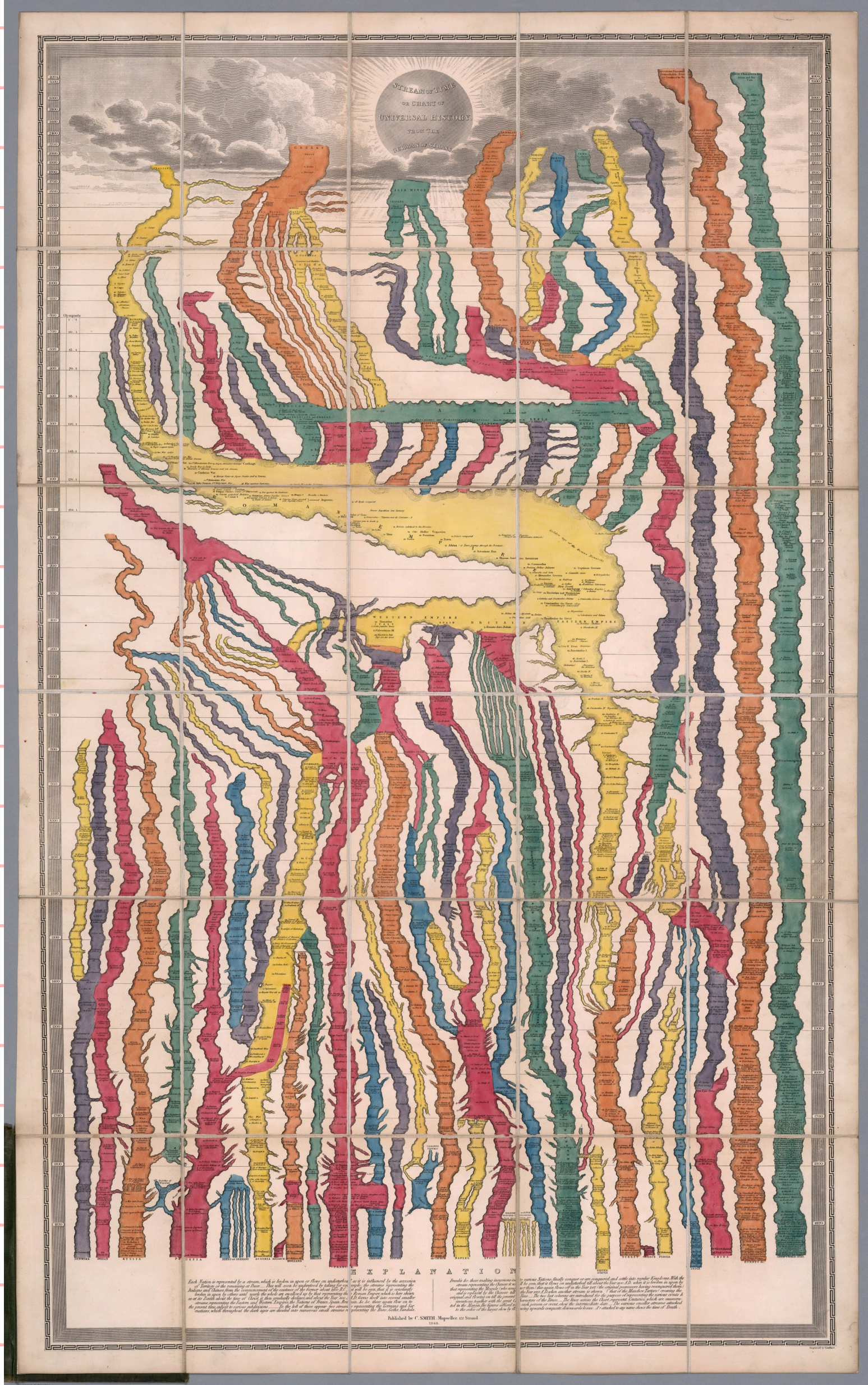
Diagrammatical Dimensions: 25 elements

<div>Quantity2A.1</div> <div></div> <div>Line length</div>	<div>Quantity2A.2</div> <div></div> <div>Line length Countable</div>	<div>Quantity2A.3</div> <div></div> <div>Line length with line break</div>	<div>Quantity2A.4</div> <div></div> <div>Line length Countable with line break</div>	<div>Quantity2A.5</div> <div></div> <div>Area size</div>	<div>Quantity2A.6</div> <div></div> <div>Area size Countable</div>	
<div>Quantity2A.7</div> <div></div> <div>Area size 100% as a circle from the center out</div>	<div>Quantity2A.8</div> <div></div> <div>Area size 100% as a circle from the edge in</div>	<div>Quantity2A.9</div> <div></div> <div>Area size 100% in an angle as a circle</div>	<div>Quantity2A.10</div> <div></div> <div>Area size 100% in an angle as a circle segment</div>	<div>Quantity2A.11</div> <div></div> <div>Area size 100% in an angle as a ring</div>	<div>Quantity2A.12</div> <div></div> <div>Area size 100% as a rectangle</div>	<div>Quantity2A.13</div> <div></div> <div>Area size 100% as a countable rectangle</div>
<div>Position2B.1</div> <div></div> <div>Points in space One coordinate axis</div>	<div>Position2B.2</div> <div></div> <div>Points in space Two coordinate axes</div>	<div>Position2B.3</div> <div></div> <div>Points in space Three coordinate axes</div>	<div>Position2B.4</div> <div></div> <div>Points in space Polar axes</div>	<div>Position2B.5</div> <div></div> <div>Points in space Geographical coordinates</div>		
<div>Relationship2C.1</div> <div></div> <div>Network Non-hierarchical</div>	<div>Relationship2C.2</div> <div></div> <div>Network Hierarchical</div>	<div>Relationship2C.3</div> <div></div> <div>Network Linear</div>	<div>Relationship2C.4</div> <div></div> <div>Network Circular</div>	<div>Relationship2C.5</div> <div></div> <div>Nesting Intersection sets</div>	<div>Relationship2C.6</div> <div></div> <div>Nesting Stacking</div>	<div>Relationship2C.7</div> <div></div> <div>Nesting Matrix</div>

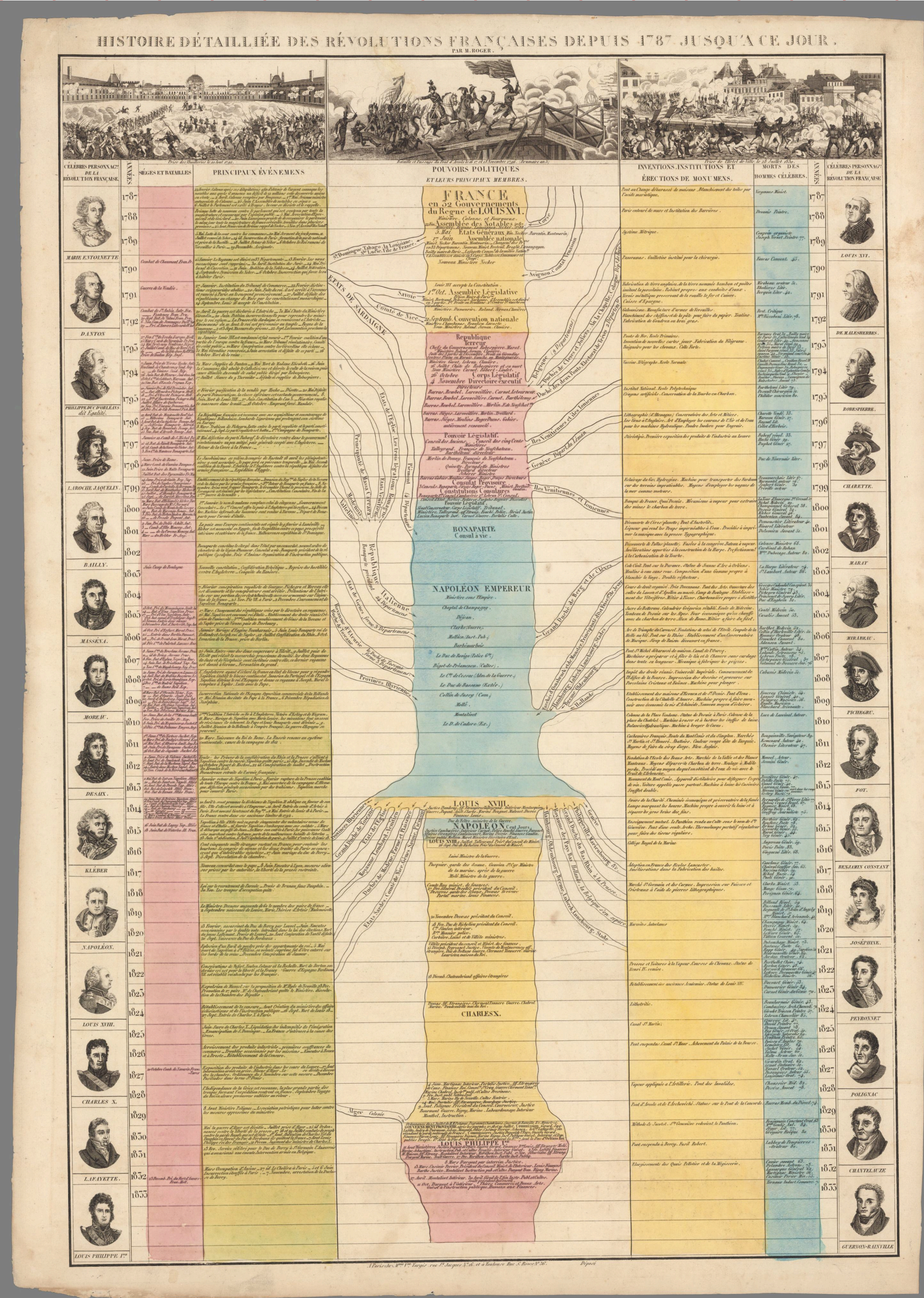
Emma Willard Temple of Time



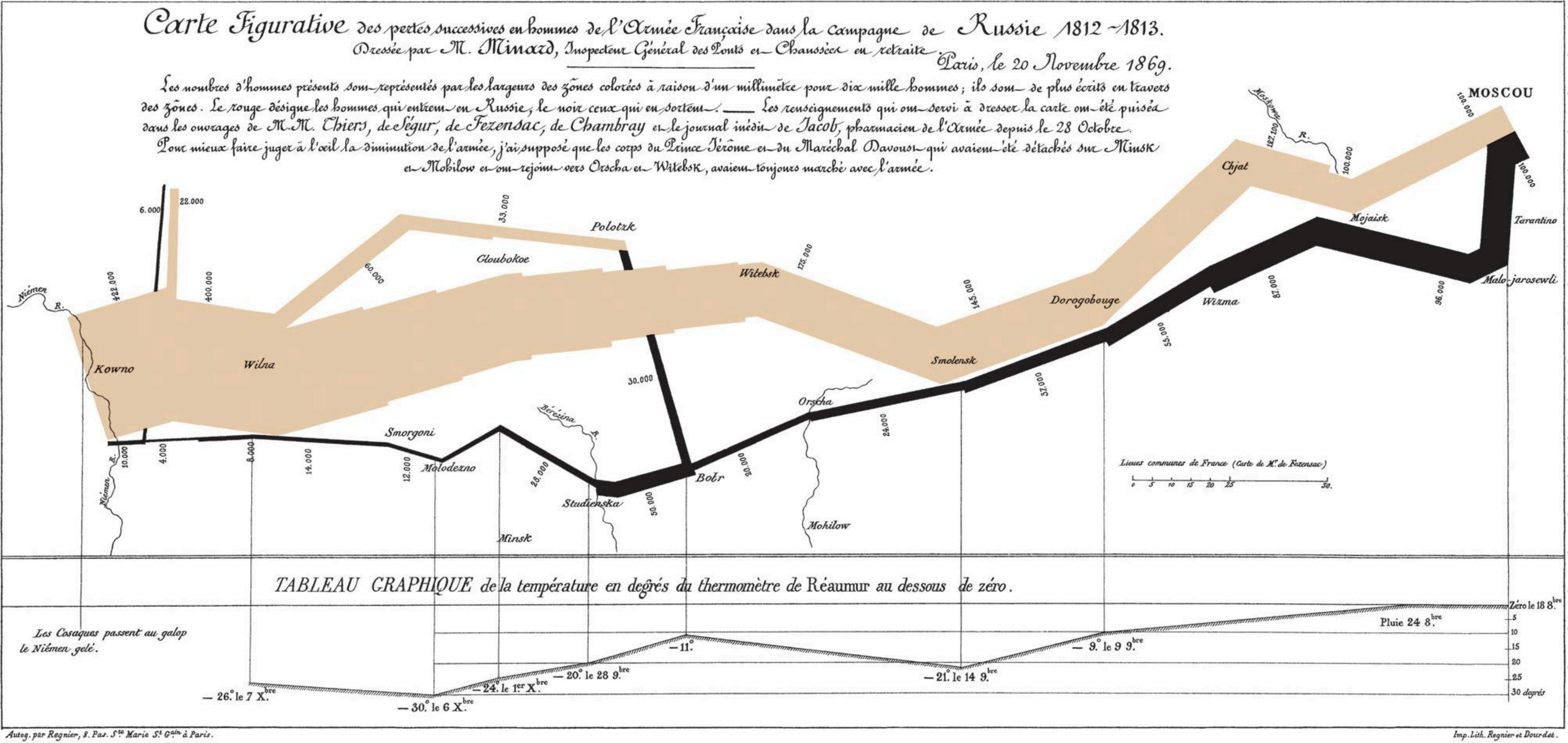
Friedrich Strass, Le
cours des tems ou
tableau de l’histoire
universelle (Paris 1818).



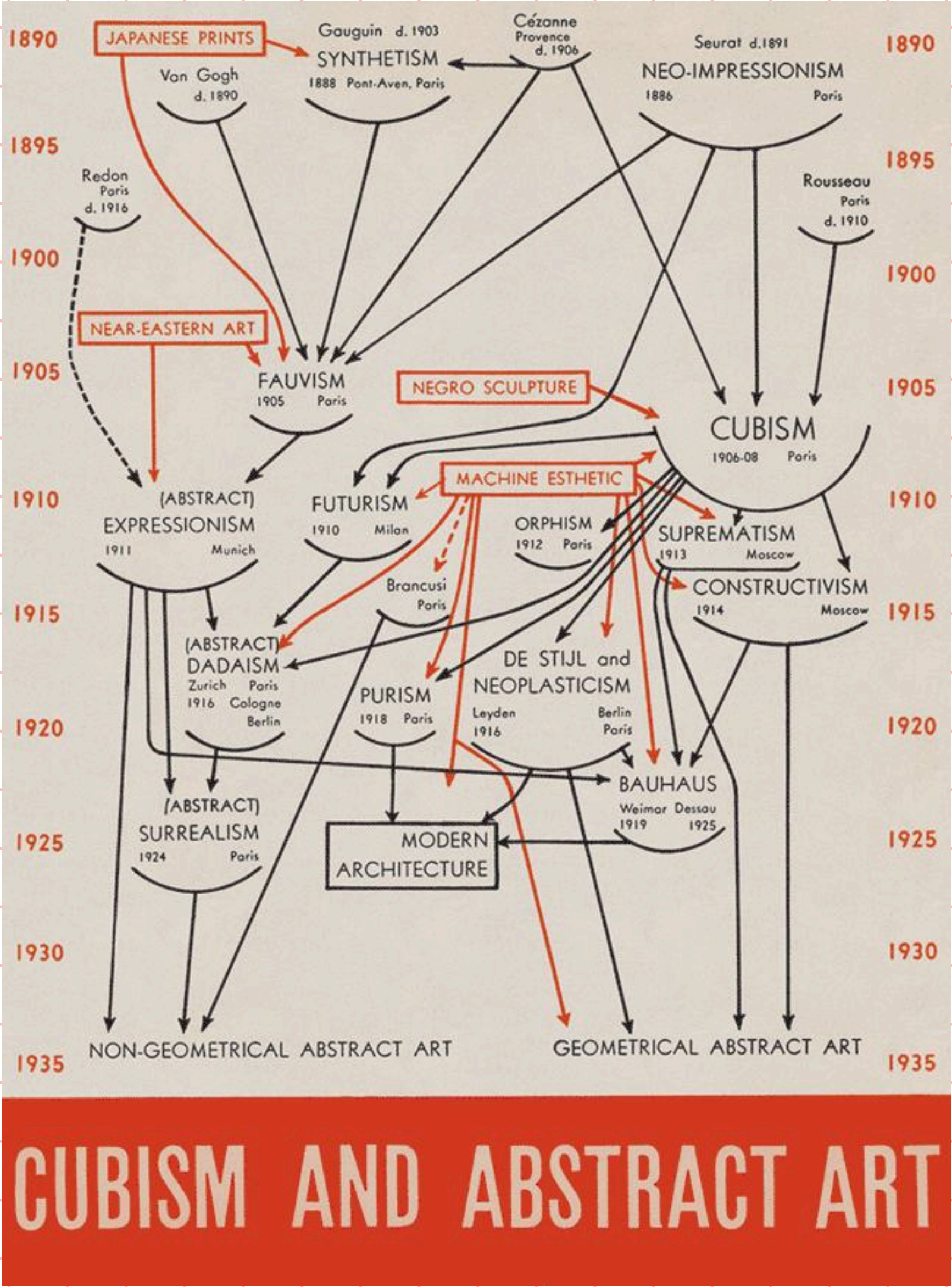
Histoire détaillée des révolutions françaises depuis 1787 jusqu'à ce jour [estampa] : par M. Roger.



Charles Joseph Minard
1863

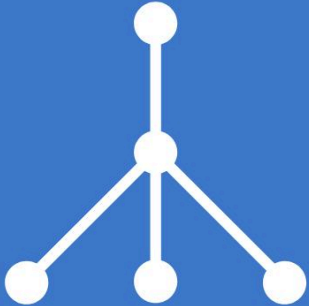
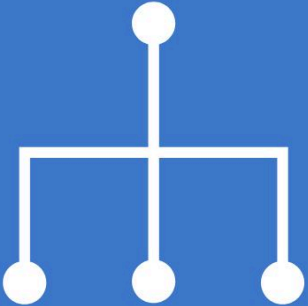

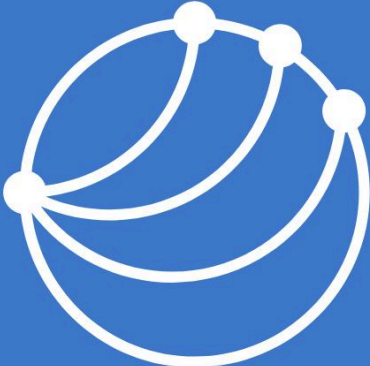


Alfred H. Barr, Jr.
for the 1936 MoMA
exhibition Cubism and
Abstract Art.




Modular Information Design

Diagrammatic Dimensions – Relationship

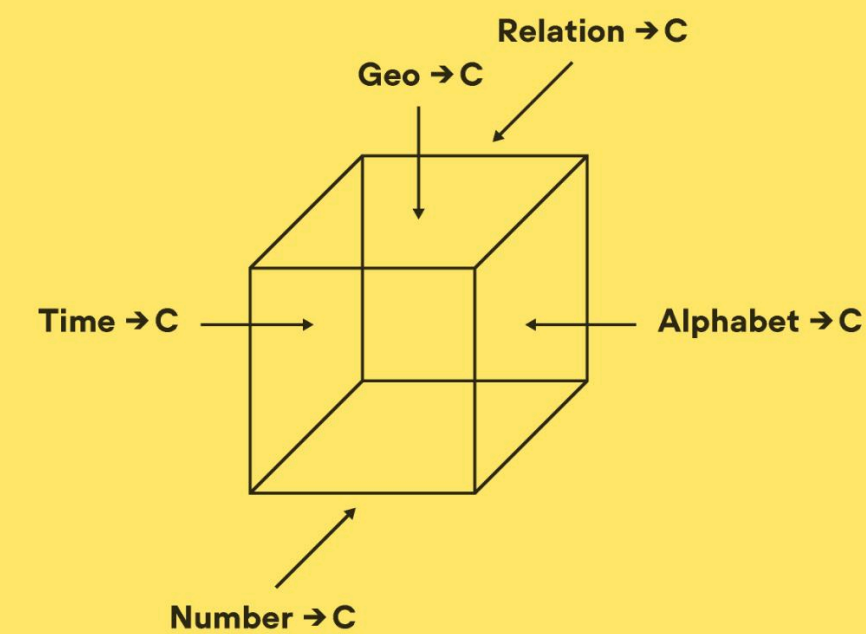
Relationship 2C.1	Relationship 2C.2	Relationship 2C.3	Relationship 2C.4
			
Network Non-hierarchical	Network Hierarchical	Network Linear	Network Circular

Unterschied?

Unterschied?

Quantity 2A.1

Line length

G.R.A.N.T. → C®



The **G.R.A.N.T.** model is complete, once the letter **C** is added. **C** stands for "**category**" and is recognizing that all five data types can converge into categories. This convergence, represented by the directional symbol (→), points to the ultimate transformation that makes data more accessible, understandable, and visualizable.

Categories represent one of the most powerful conceptual tools in information design. While raw data in its original form (whether geolocation, network relationships, alphabetical text, numerical values, or timestamps) contains the complete information, categorical transformations make this information easier to compare and more suitable for visual playful encoding.

The transformation into categories is not a simplification that loses information, but makes information more accessible. The ability to recognize when and how to create meaningful categories from any data type represents a fundamental skill in information design.

Each **G.R.A.N.T.** data type converges to categories: **G.R.A.N.T. → C** ©

G.eolocation → C.ategories
Spatial data can be transformed into categorical groups such as geographic regions

R.elation → C.ategories
Connection data can be categorized by e.g. relationship type. (parents, children)

A.lphabet → C.ategories
Textual data can be grouped into e.g. name groups or alphabetical ranges (A–D, E–H)

N.umber → C.ategories
Quantitative data can be grouped into e.g. value ranges (low, medium, high)

T.ime → C.ategories
Temporal data can be categorized into e.g. periods and eras (19th century)

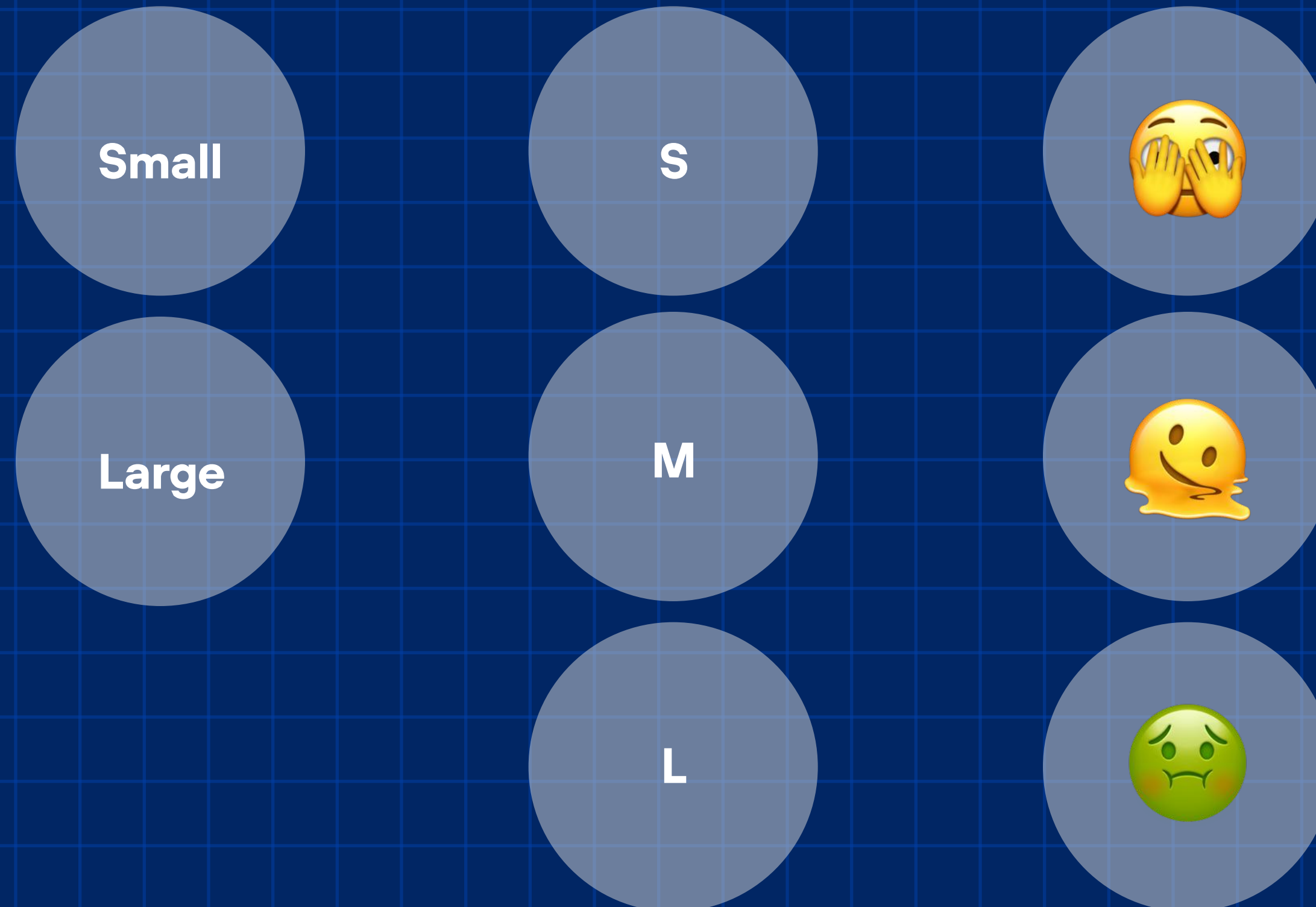
Family name	First name	Place of birth	Year of birth	Home town	Year of death	Gender	Generation	Relocation	Age group	Children
Wagner	Hermann	Vienna	1850–1899	Vienna	1950–1999	M	1	N	>85	Otto, Paul
Wagner	Emma	Vienna	1850–1899	Vienna	1950–1999	F	1	N	70–85	Otto, Paul
Brown	Marie	Paris	1850–1899	Paris	1950–1999	F	1	N	70–85	Anna, Elisabeth
Brown	James	London	1850–1899	Paris	1900–1949	M	1	Y	<70	Anna, Elisabeth
Wagner	Otto	Vienna	1900–1949	Munich	1900–1949	M	2	Y	<70	no
Brown	Anna	London	1900–1949	London	1950–1999	F	2	N	70–85	no
Wagner	Paul	Vienna	1900–1949	Vienna	2000–2049	M	2	N	>85	Hermann, Marie
Wagner	Elisabeth	Paris	1900–1949	Paris	2000–2049	F	2	N	>85	Hermann, Marie
Wagner	Hermann Jr.	Paris	1900–1949	Vienna	1950–1999	M	3	Y	<70	no
Wagner	Marie Jr.	Paris	1900–1949	London	2000–2049	F	3	Y	70–85	no
Category	Category	Category	Category	Category	Category	Category	Category	Category	Category	Category

G.R.A.N.T. > C

Geolocation
Relation
Alphabet
Number
Time





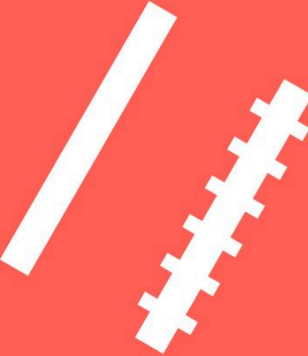



- **C**ategory
- **C**ategory
- **C**ategory
- **C**ategory
- **C**ategory

Bins definieren



Modular Information Design

Visual Dimensions: Line elements

<div>Line3C.1</div> <div></div> <div>Color</div>	<div>Line3C.2</div> <div></div> <div>Thickness</div>	<div>Line3C.3</div> <div></div> <div>Interruption</div>	<div>Line3C.4</div> <div></div> <div>Roughing</div>	<div>Line3C.5</div> <div></div> <div>Details</div>
<div>Line3C.6</div> <div></div> <div>Organic</div>	<div>Line3C.7</div> <div></div> <div>Detail Beginning or end</div>	<div>Line3C.8</div> <div></div> <div>Arrow</div>		

