

**Science  
Communication  
Uni Basel – 5.12.2024  
Every dot has an identity**



**Superdot Studio  
Nicole Lachenmeier  
Darjan Hil**

**Exam  
12.12.24**

**Questions for the exam?  
Assigement adjustments possible**

**[darjan.hil@unibas.ch](mailto:darjan.hil@unibas.ch)  
[nicole.lachenmeier@unibas.ch](mailto:nicole.lachenmeier@unibas.ch)**

# Modular Information Design

## Europe in numbers

COUNTRY	CODE	Total Pop2021 in1mio	DiffPop 2021_2011 in percent	LandArea 2022 in_1000KM2	PopDensity per km2 2020	Degree of urbanisation 2021	Position Europa	In E.U.	Euro	Pop a*a
Iceland	IS	0.4	16%	103	4	94%	North	non EU	no EURO	0.6
Latvia	LV	2	-9%	63	31	68%	North	in EU	EURO	1.4
Croatia	HR	4	-6%	56	72	58%	South	in EU	EURO	2.0
Norway	NO	5	10%	385	15	83%	North	non EU	no EURO	2.3
Switzerland	CH	9	10%	41	219	74%	West	non EU	no EURO	2.9
Hungary	HU	10	-3%	91	107	72%	East	in EU	no EURO	3.1
Portugal	PT	10	-3%	91	112	67%	South	in EU	EURO	3.2
Romania	RO	19	-5%	234	84	54%	East	in EU	no EURO	4.4
Spain	ES	47	2%	503	95	81%	South	in EU	EURO	6.9
France	FR	68	4%	634	123	81%	West	in EU	EURO	8.2
SUM or MEDIAN		175	-0.5%	2'202	89.5	73%	10	10	10	
CATEGORY		Total Pop2021 in1mio	DiffPop 2021_2011 in percent	LandArea 2022 in_1000KM2	PopDensity per km2 2020	Degree of urbanisation 2021	Position Europa	In E.U.	Euro	
Iceland	IS	0.4	16%	103	4	94%	North	non EU	no EURO	0.6
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France	FR	68	4%	634	123	81%	West	in EU	EURO	8.2

# Modular Information Design

## Elements of quantity: countable

Quantity

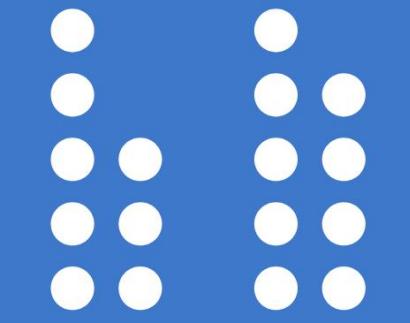
2A.2



Line length  
Countable

Quantity

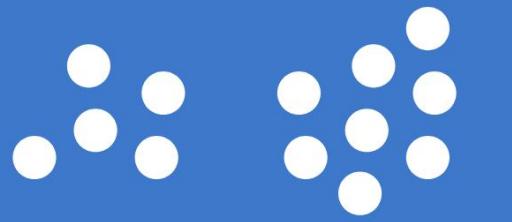
2A.4



Line length  
Countable with line break

Quantity

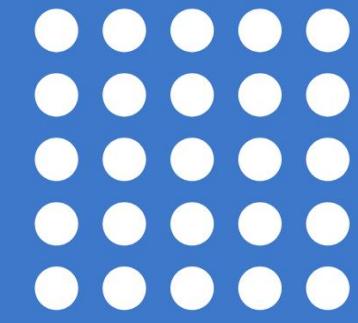
2A.6



Area size  
Countable

Quantity

2A.13



Area size 100%  
as a countable rectangle

# **Exercise G**

## **in-class**

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**Class** **Superdot Studio / Modular Information Design**  
**5.12.2024**

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**Task** **Every dot has an identity**

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**Material** **A5 paper (portrait format) / 4x color pens / ruler / scanner app**

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**Step 1** **Copy the table from the following slide and add the 4th empty column as well.**

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**Step 2** **Define a dot identity / symbol for each line in the table.  
Find inspiration in the elements of the visual dimensions, see slide.**

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**Step 3** **Scan (with scanning app) your sketch as .jpg  
Upload your sketch/table to Adam till Thursday 5.12 / 10pm**

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**Step 4** **Fill out the evaluation of the Science Communication class  
QR Code Link next slide – till Thursday 5.12 / 10pm**

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# Science Communication

## Evaluation 5.12



# Europe in Numbers

## In-class Exercise G

Euro / no Euro	Position in Europe	Total Population	Dot identity / Symbol
Euro	North	S	
		M	
		L	
		XL	
	South	S	
		M	
		L	
		XL	
no Euro	North	S	
		M	
		L	
		XL	
	South	S	
		M	
		L	
		XL	

# Modular Information Design

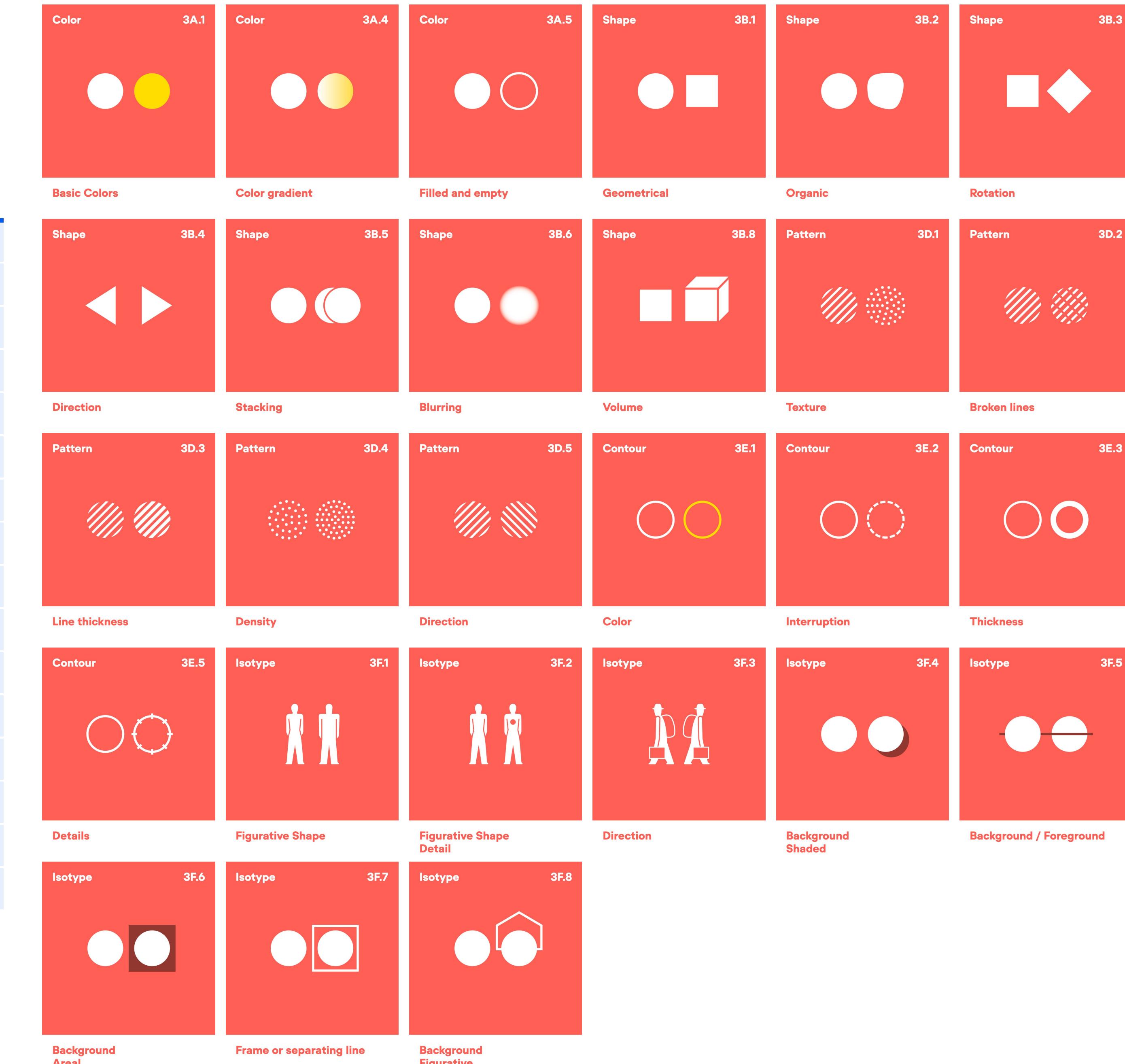
## Visual Dimensions selection

Color	3A.1	Color	3A.4	Color	3A.5	Shape	3B.1	Shape	3B.2	Shape	3B.3	Shape	3B.4	Shape	3B.5	Shape	3B.6	Shape	3B.7
Basic Colors		Color gradient		Filled and empty		Geometrical		Organic		Rotation		Direction		Stacking		Blurring		Transformation	
Shape	3B.8	Pattern	3D.1	Pattern	3D.2	Pattern	3D.3	Pattern	3D.4	Pattern	3D.5	Contour	3E.1	Contour	3E.2	Contour	3E.3	Contour	3E.4
Volume		Texture		Broken lines		Line thickness		Density		Direction		Color		Interruption		Thickness		Shape	
Contour	3E.5	Isotype	3F.1	Isotype	3F.2	Isotype	3F.3	Isotype	3F.4	Isotype	3F.5	Isotype	3F.6	Isotype	3F.7	Isotype	3F.8		
Details		Figurative Shape		Figurative Shape Detail		Direction		Background Shaded		Background / Foreground		Background Areal		Frame or separating line		Background Figurative			

# Europe in Numbers

## In-class Exercise G

Euro / no Euro	Position in Europe	Total Population	Symbol
Euro	North	S	
		M	
		L	
		XL	
	South	S	
		M	
		L	
		XL	
no Euro	North	S	
		M	
		L	
		XL	
	South	S	
		M	
		L	
		XL	

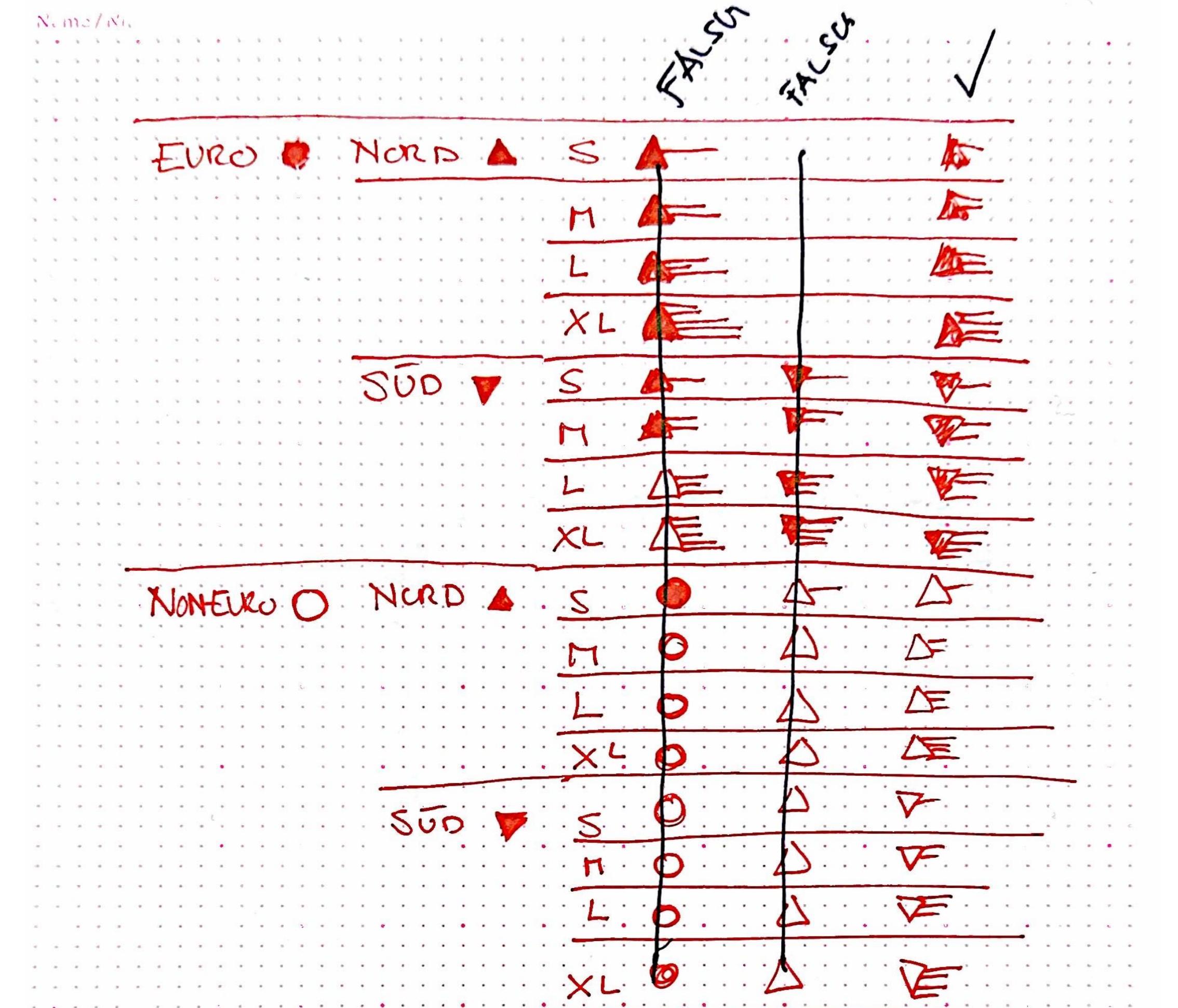


# Europe in Numbers

## In-class Exercise G

### Result example

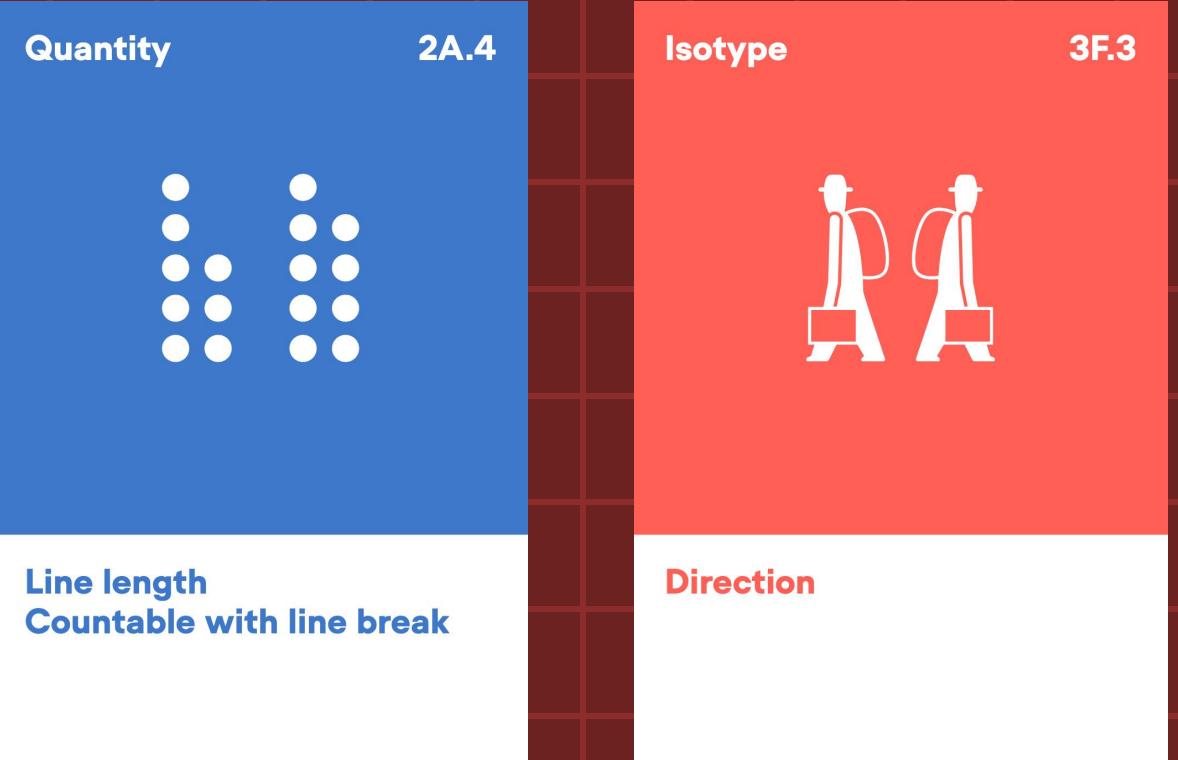
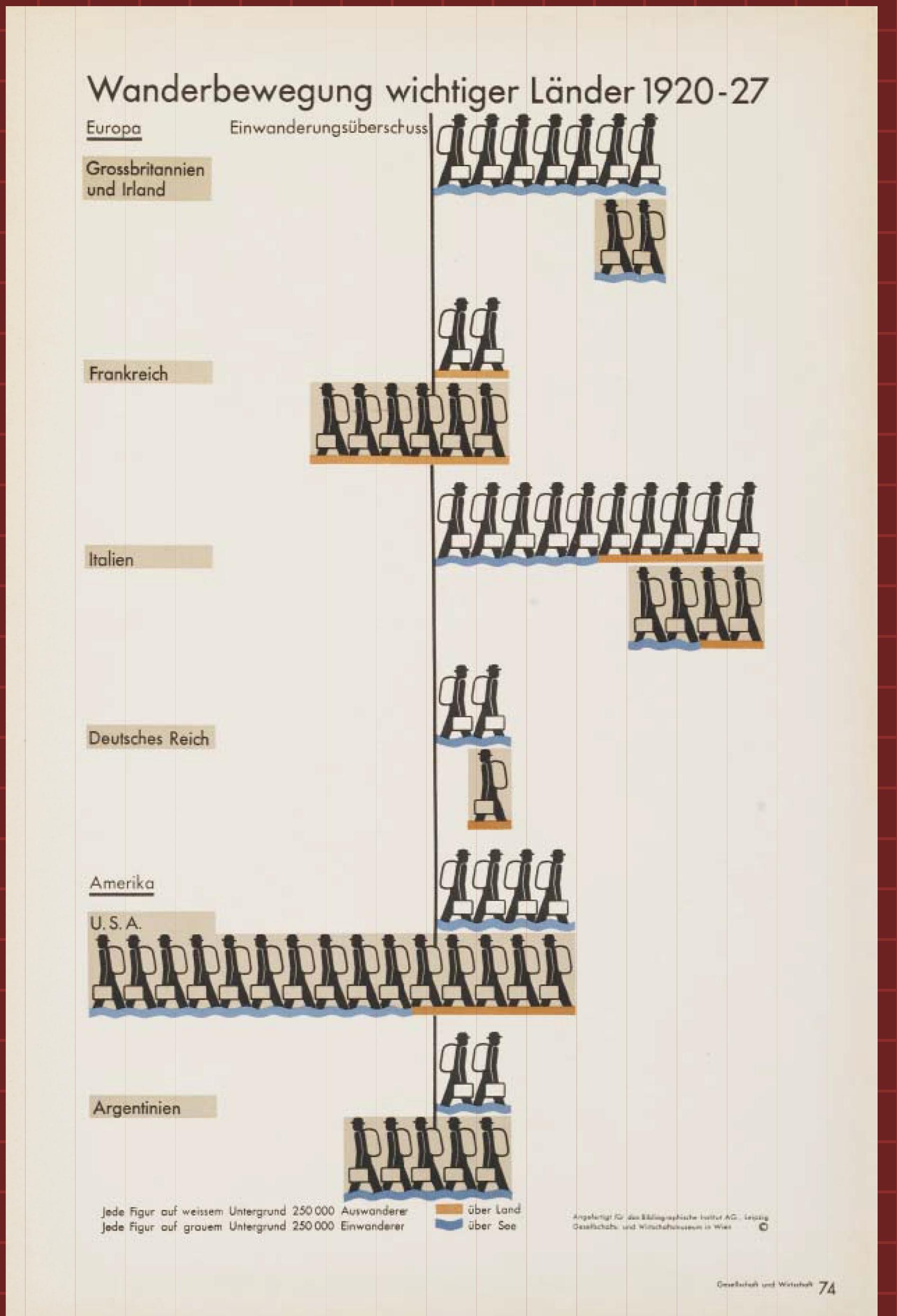
Euro / no Euro	Position in Europe	Total Population	Symbol
Euro	North	S	
		M	
		L	
		XL	
	South	S	
		M	
		L	
		XL	
no Euro	North	S	
		M	
		L	
		XL	
	South	S	
		M	
		L	
		XL	



Data → MID Element → Legend

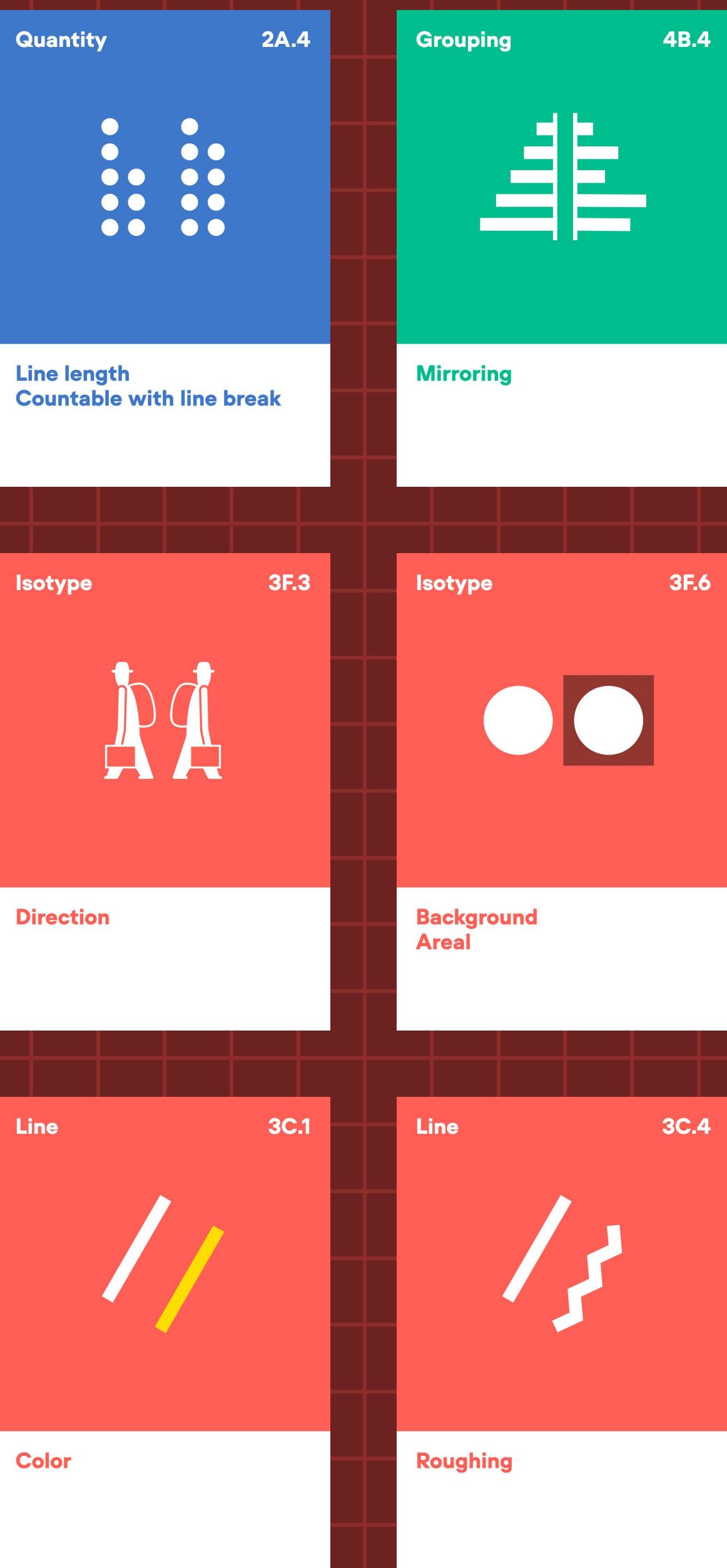
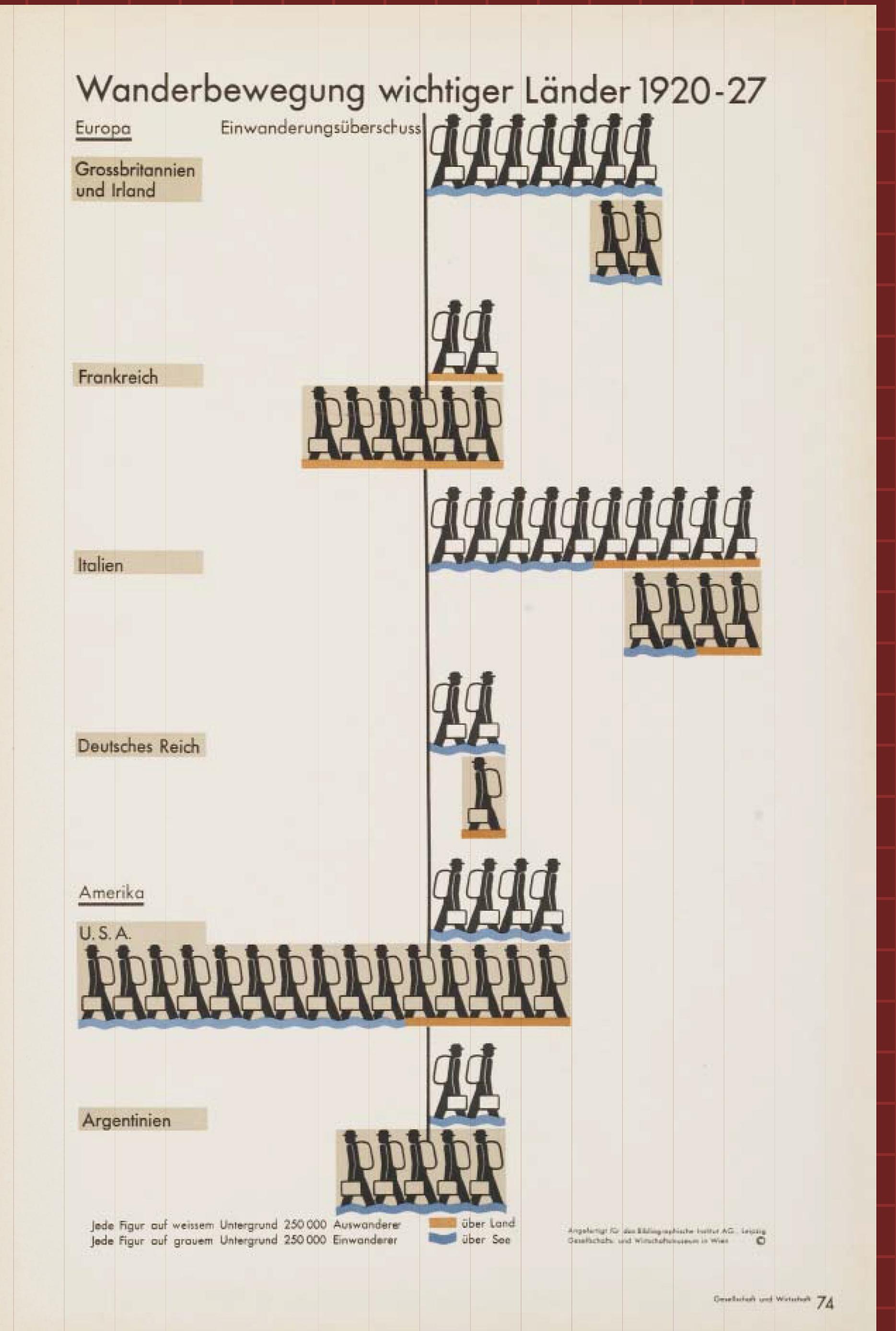
# Every dot has an identity

Otto Neurath  
Gesellschaft und Wirtschaft 1930



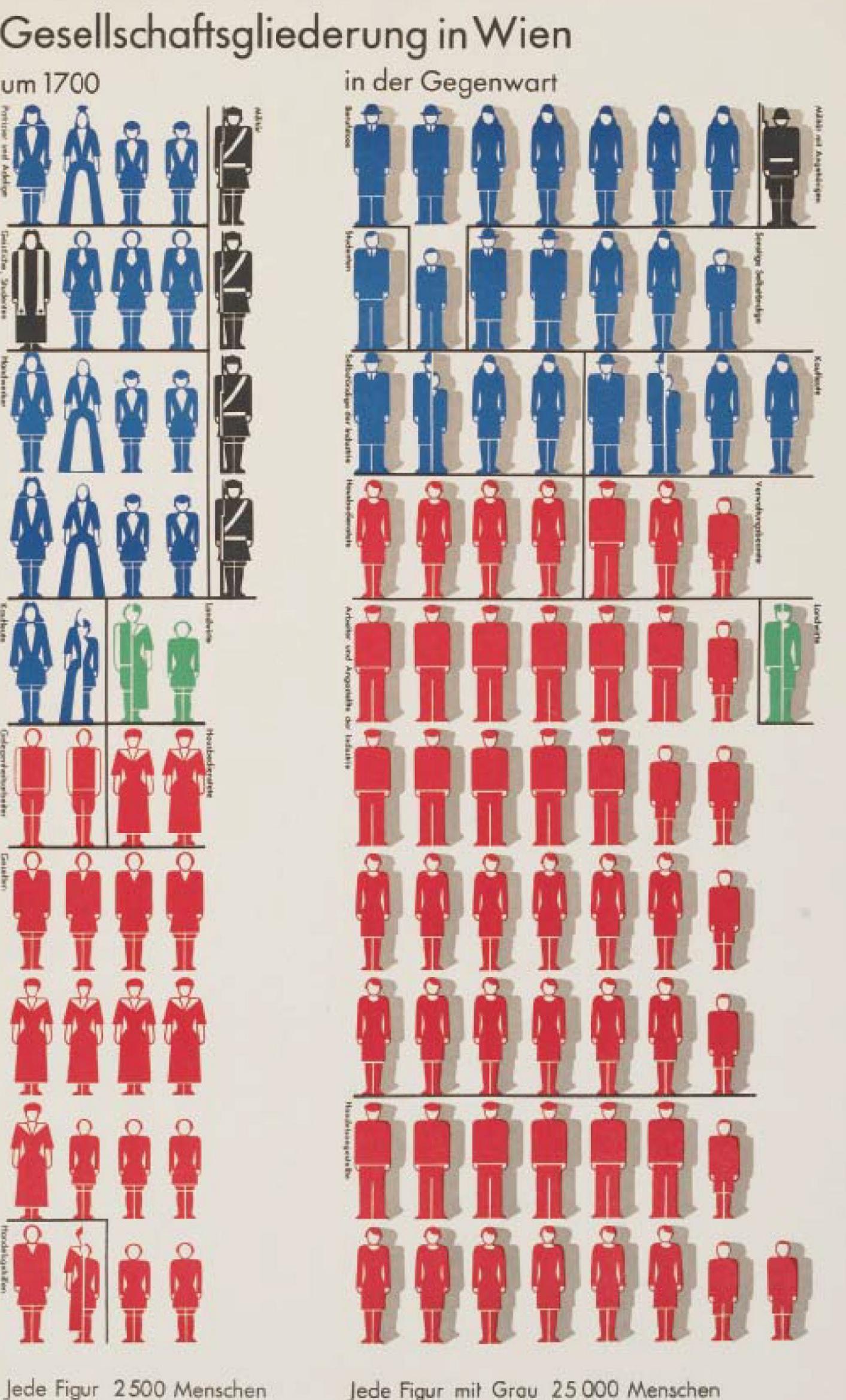
# Every dot has an identity

Otto Neurath  
Gesellschaft und Wirtschaft 1930

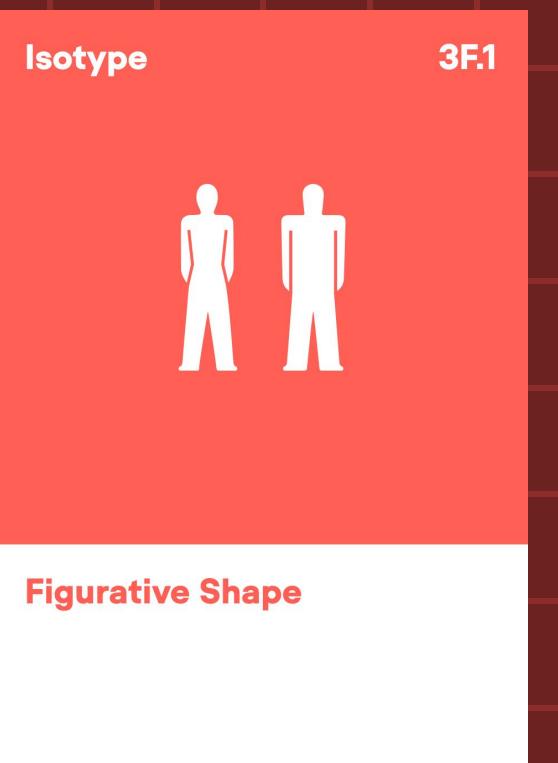
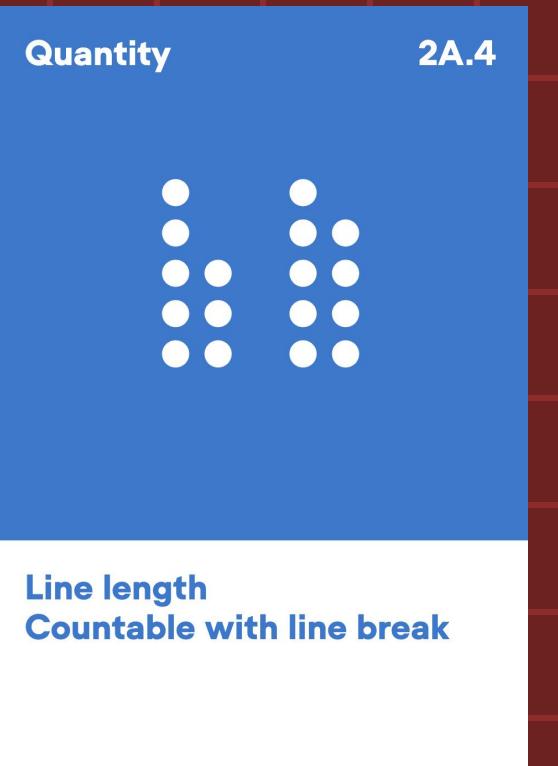


# Every dot has an identity

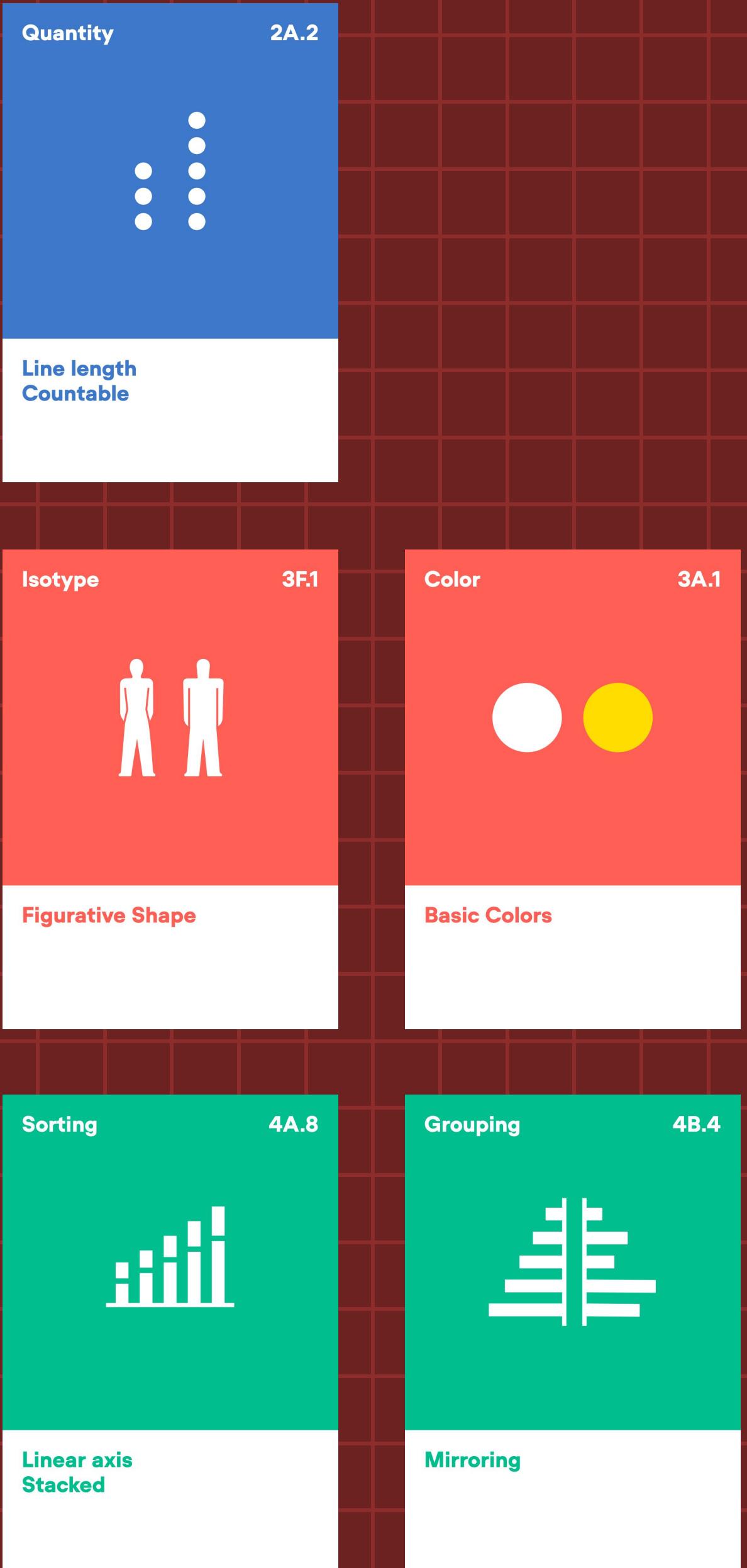
Otto Neurath  
Gesellschaft und  
Wirtschaft 1930



# Otto Neurath Gesellschaft und Wirtschaft 1930



# Otto Neurath Gesellschaft und Wirtschaft 1930

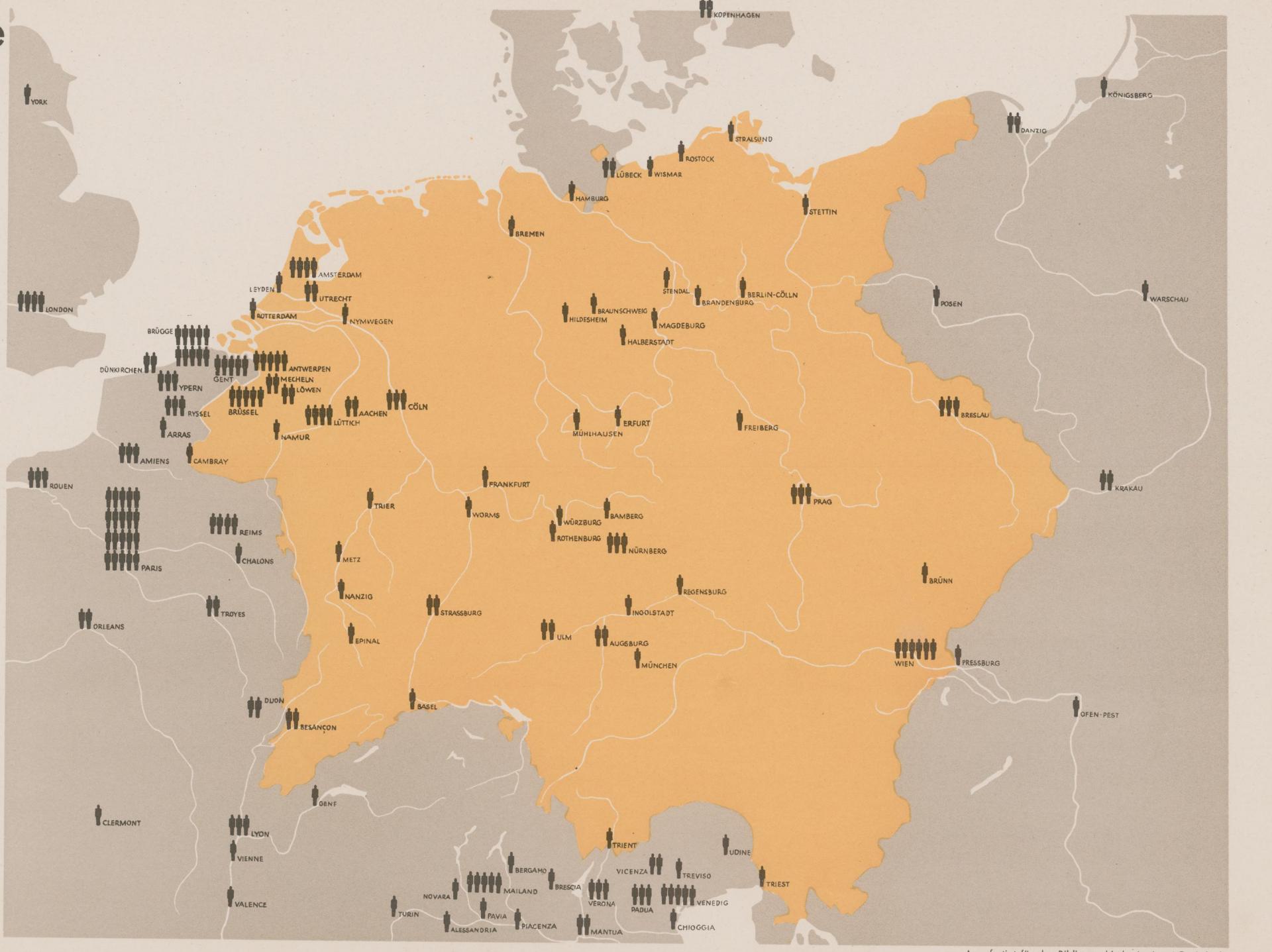


# Otto Neurath Gesellschaft und Wirtschaft 1930

Deutsche Städte  
im  
15. Jahrhundert

Jede Figur 10 000 Einwohner

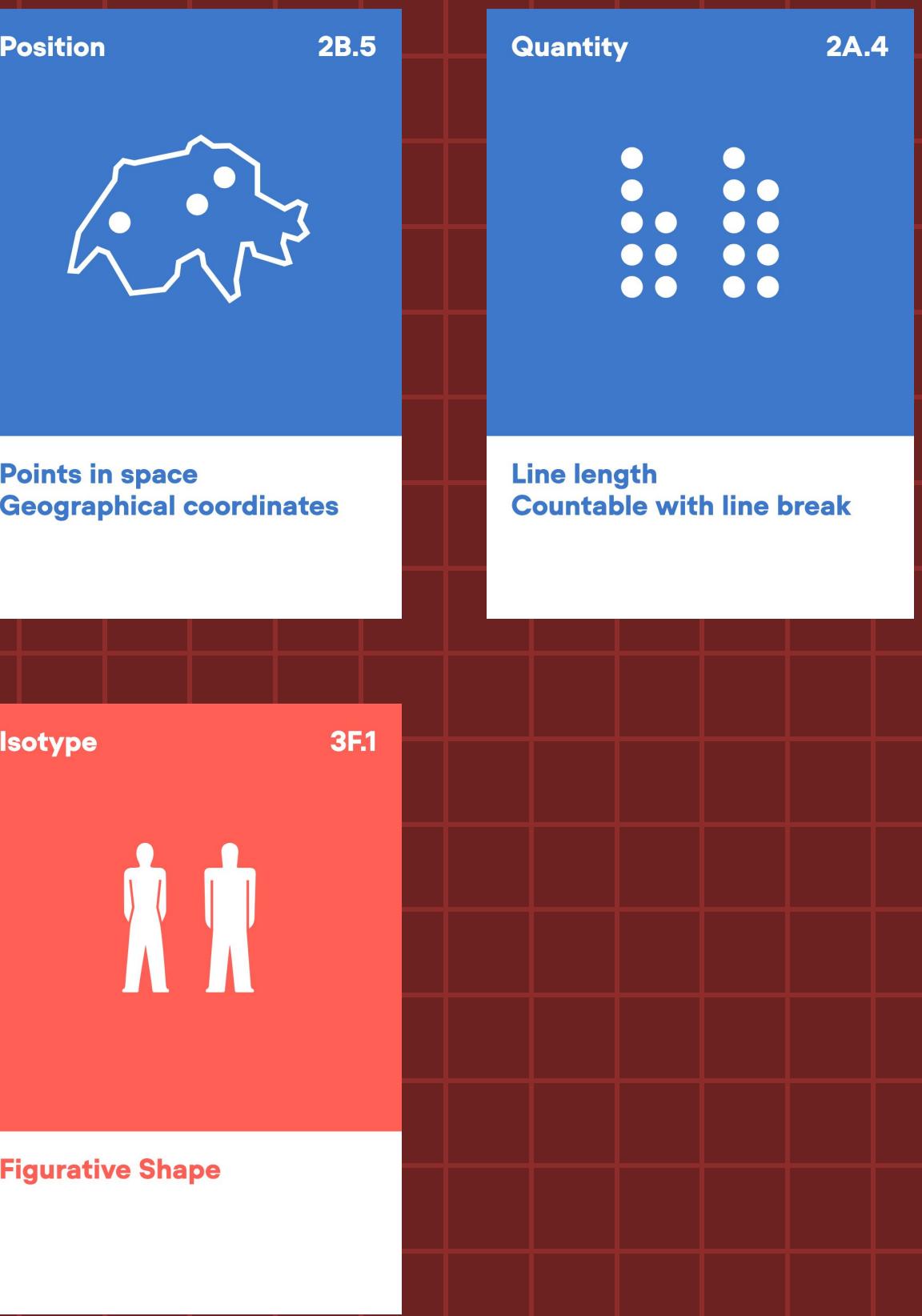
Grenzen Deutschlands im Jahre 1477  
(ohne Gebiet des Deutschen Ritterordens)



Gesellschaft und Wirtschaft 15

Gesellschaft und Wirtschaft 92

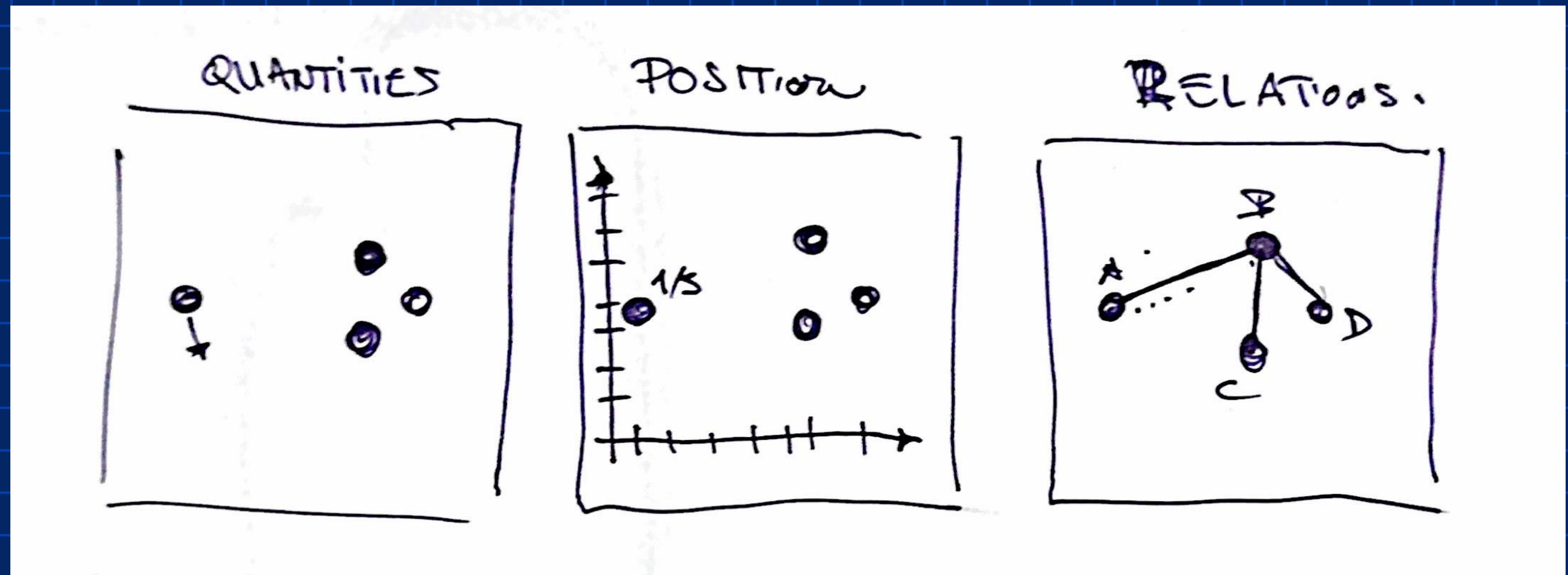
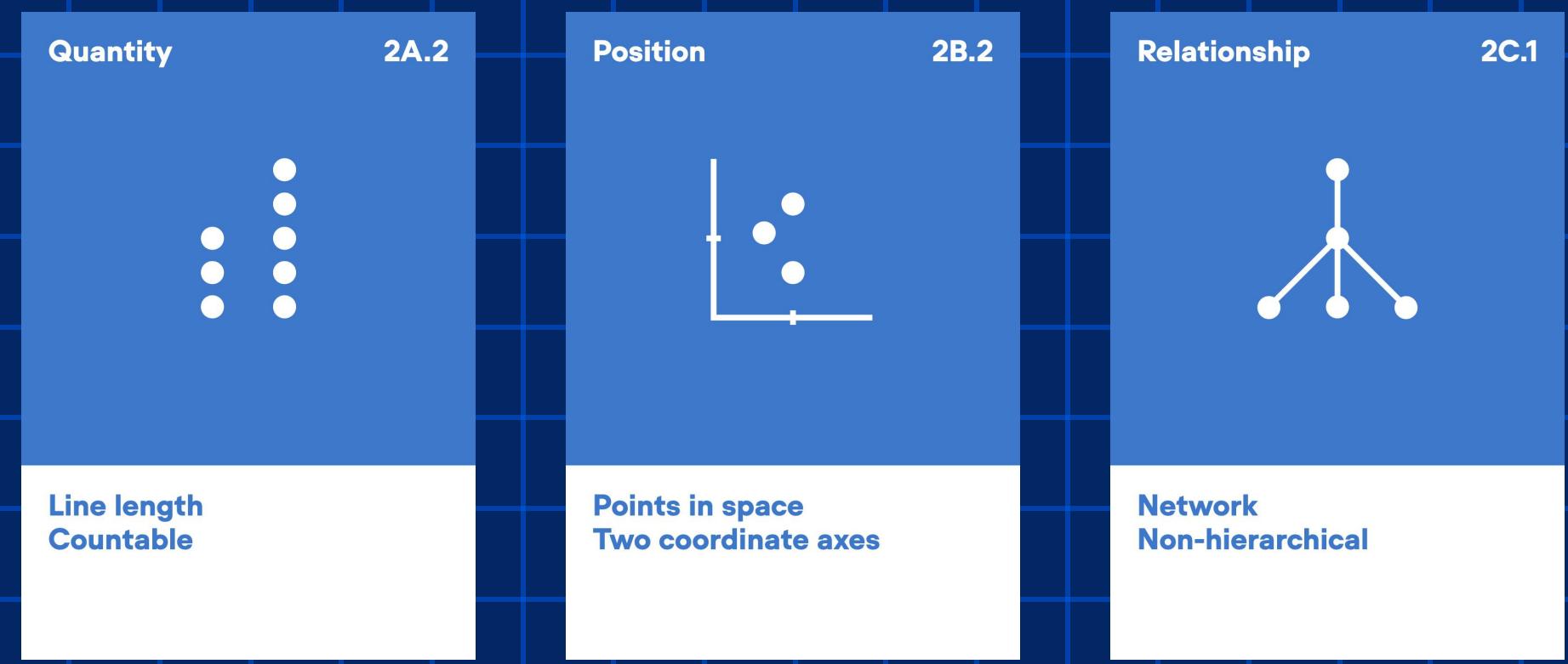
Gesellschaft und Wirtschaft 72



# Modular Information Design

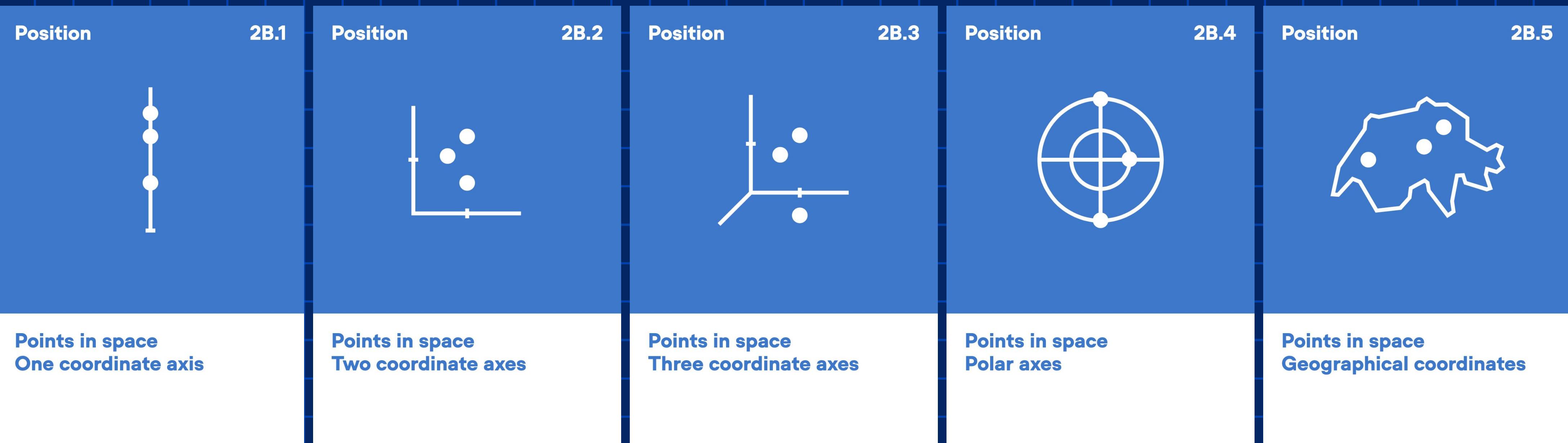
## Diagrammatic Dimensions

### Quantity – Position – Relationship



# Modular Information Design

## Diagrammatic Dimensions – Position

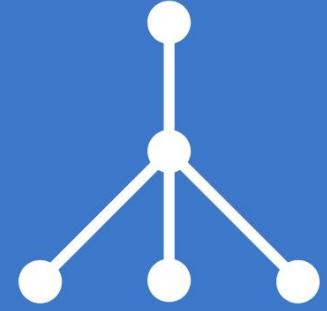


# Modular Information Design

## Diagrammatic Dimensions – Relationship

Relationship

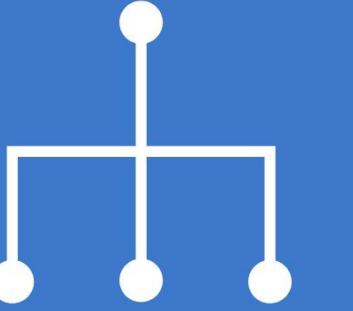
2C.1



Network  
Non-hierarchical

Relationship

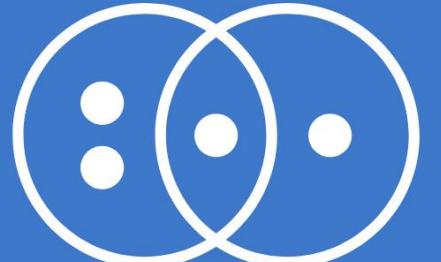
2C.2



Network  
Hierarchical

Relationship

2C.5



Nesting  
Intersection sets

Relationship

2C.3



Network  
Linear

Relationship

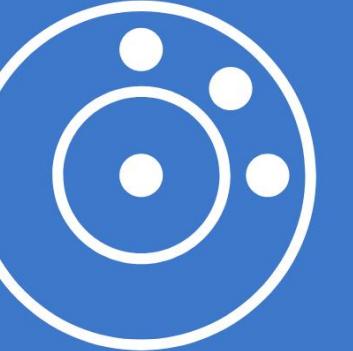
2C.4



Network  
Circular

Relationship

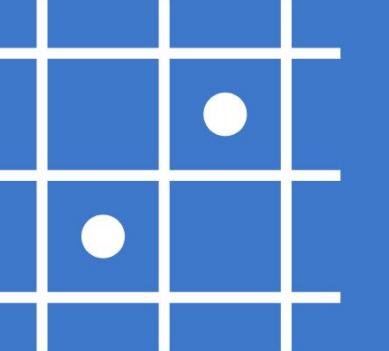
2C.6



Nesting  
Stacking

Relationship

2C.7



Nesting  
Matrix

# Exercise G homework

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Class

**Superdot Studio / Modular Information Design**  
**5.12.2024**

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Task

**Relationship Visualization**  
**On Data And Design talk**

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Material

**A5 grid paper (portrait format) / 4x color pens / ruler / scanner app**

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Step 1

**Select one of the talks you already worked on in exercise F**  
**On Data And Design Youtube channel**

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Step 2

**Visualize the relationships in the selected On Data And Design talk with Modular Information Design Elements**  
**Use selected elements: Diagrammatic Dimensions – Relationship (blue)**  
**Use selected elements: Visual Dimensions – For dots (red)**  
**Use selected elements: Visual Dimensions – For lines (red)**

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Step 3

**Legend: Add number of the used elements or draw the used elements**

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Step 4

**Scan (with scanning app) your sketch as .jpg**  
**Upload your sketch/table to Adam till Wednesday 11.12 / 10am**

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# Modular Information Design

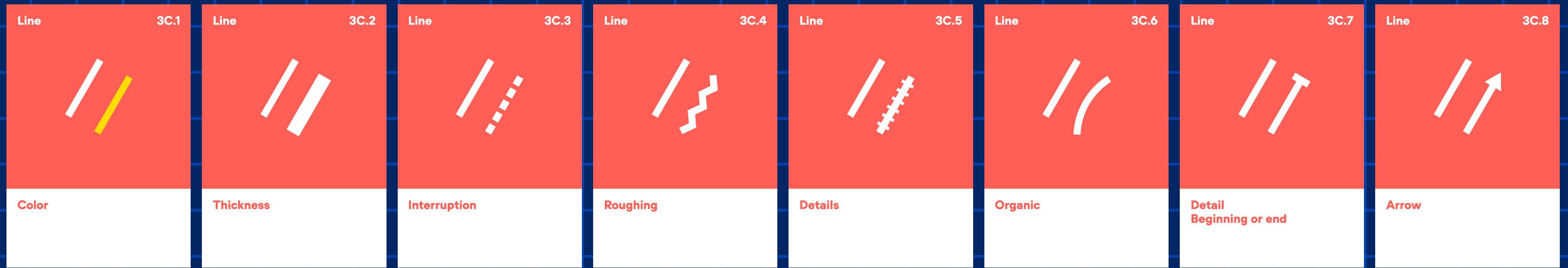
## Visual Dimensions selection

### For dots

Color 	3A.1	Color 	3A.4	Color 	3A.5	Shape 	3B.1	Shape 	3B.2	Shape 	3B.3	Shape 	3B.4	Shape 	3B.5	Shape 	3B.6	Shape 	3B.7
Basic Colors		Color gradient		Filled and empty		Geometrical		Organic		Rotation		Direction		Stacking		Blurring		Transformation	
Shape 	3B.8	Pattern 	3D.1	Pattern 	3D.2	Pattern 	3D.3	Pattern 	3D.4	Pattern 	3D.5	Contour 	3E.1	Contour 	3E.2	Contour 	3E.3	Contour 	3E.4
Volume		Texture		Broken lines		Line thickness		Density		Direction		Color		Interruption		Thickness		Shape	
Contour 	3E.5	Isotype 	3F.1	Isotype 	3F.2	Isotype 	3F.3	Isotype 	3F.4	Isotype 	3F.5	Isotype 	3F.6	Isotype 	3F.7	Isotype 	3F.8	Isotype 	
Details		Figurative Shape		Figurative Shape Detail		Direction		Background Shaded		Background / Foreground		Background Areal		Frame or separating line		Background Figurative			

# Modular Information Design

## Visual Dimensions selection: For lines



# **Text and numbers**

**Data**

**Visualization**

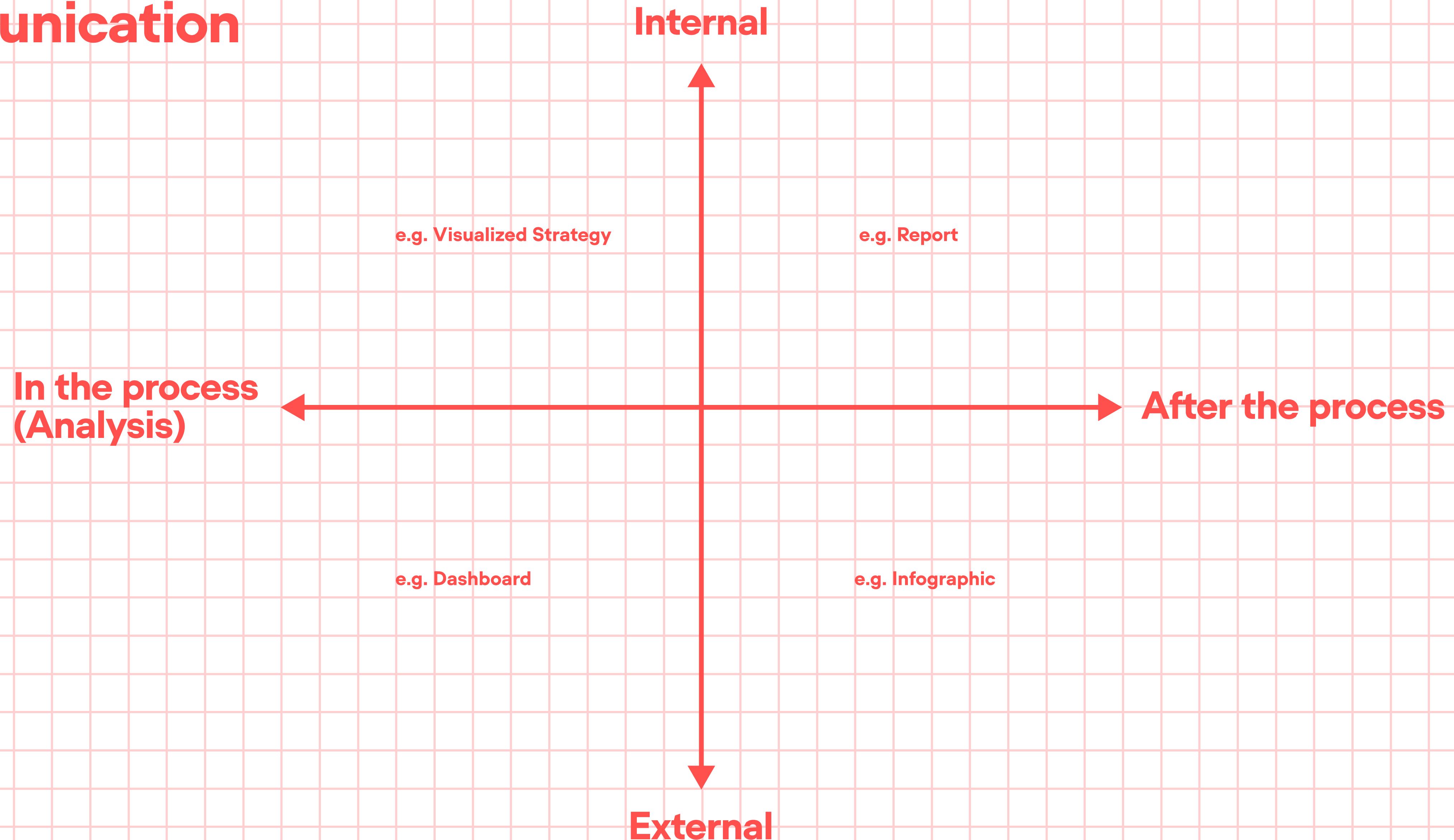
**Knowledge**

# Knowledge Visualization

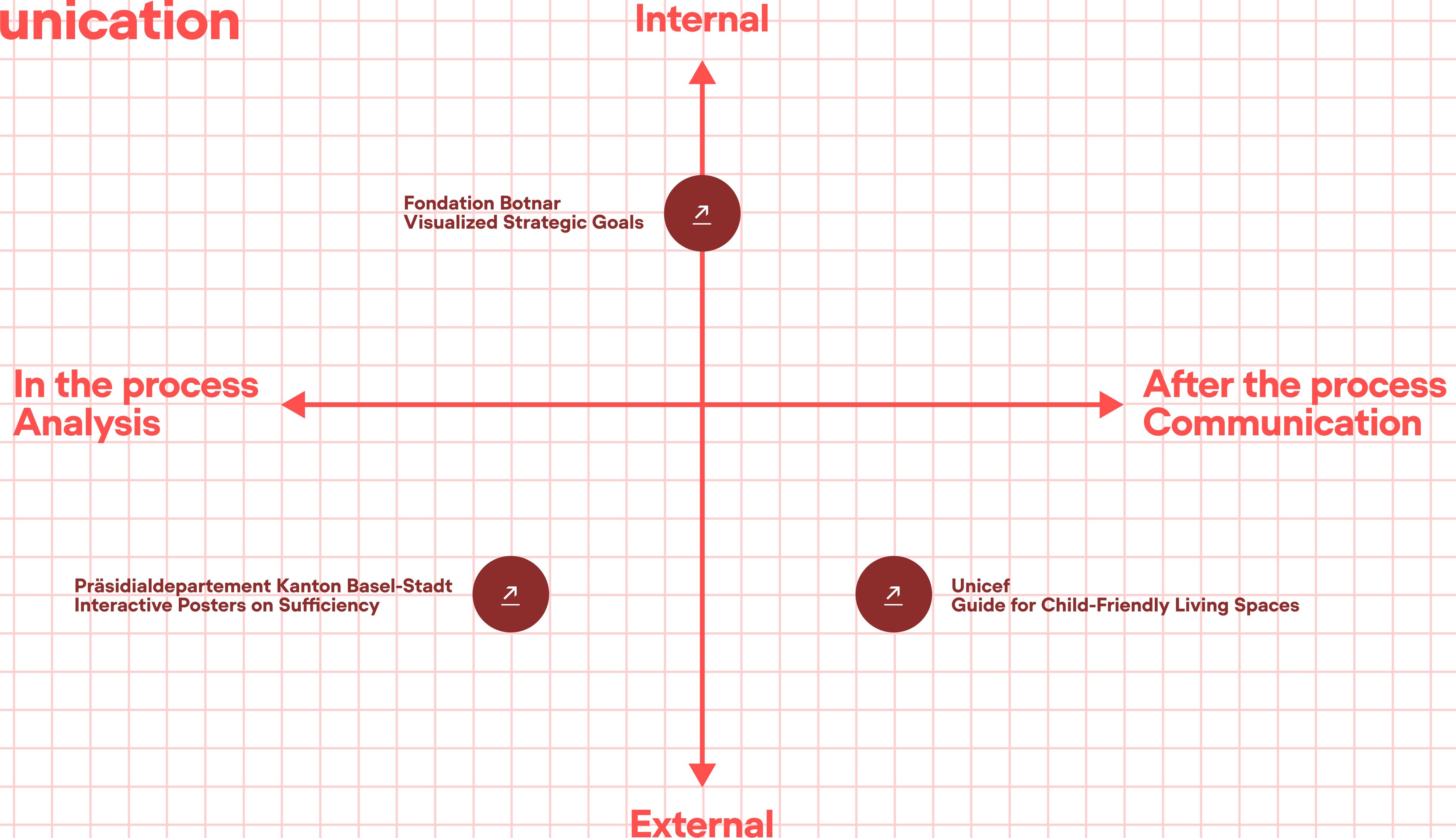


Knowledge

# Visualization for Communication



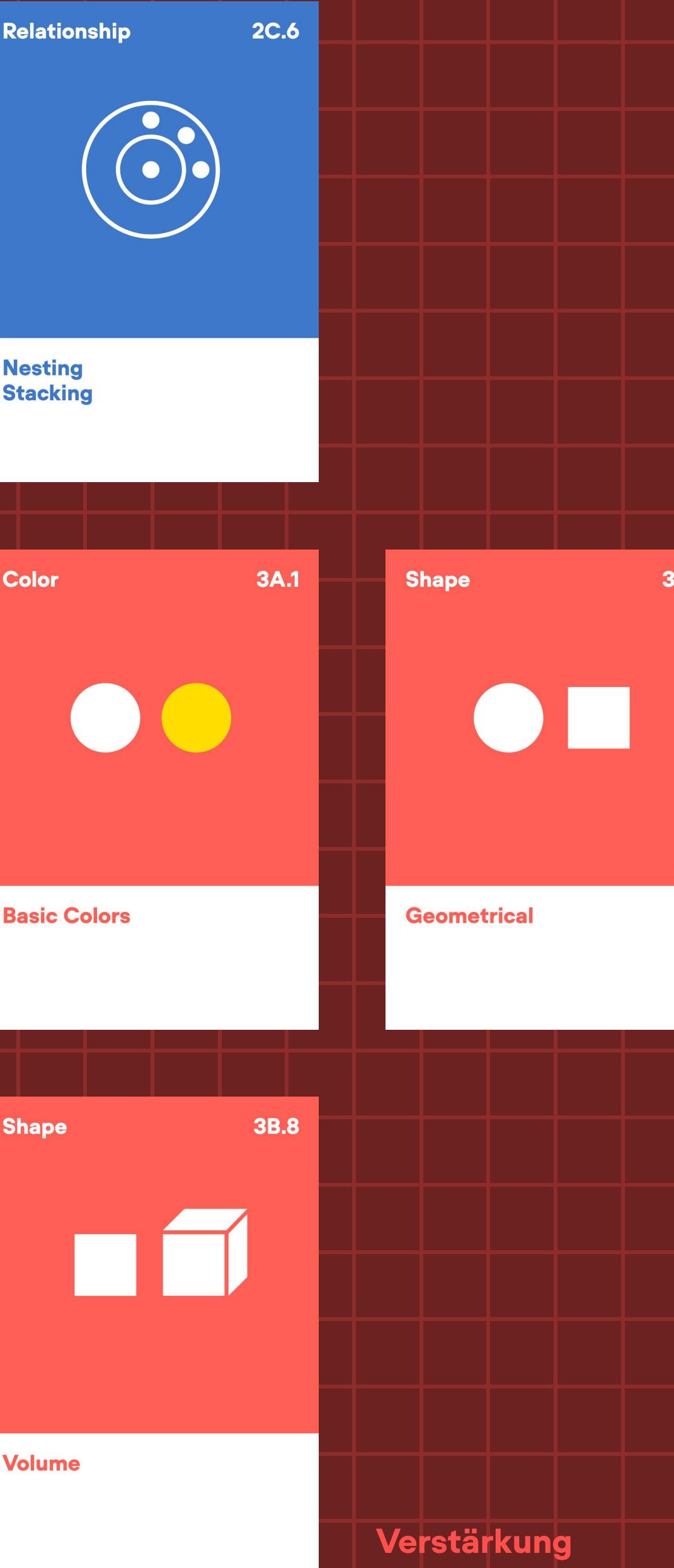
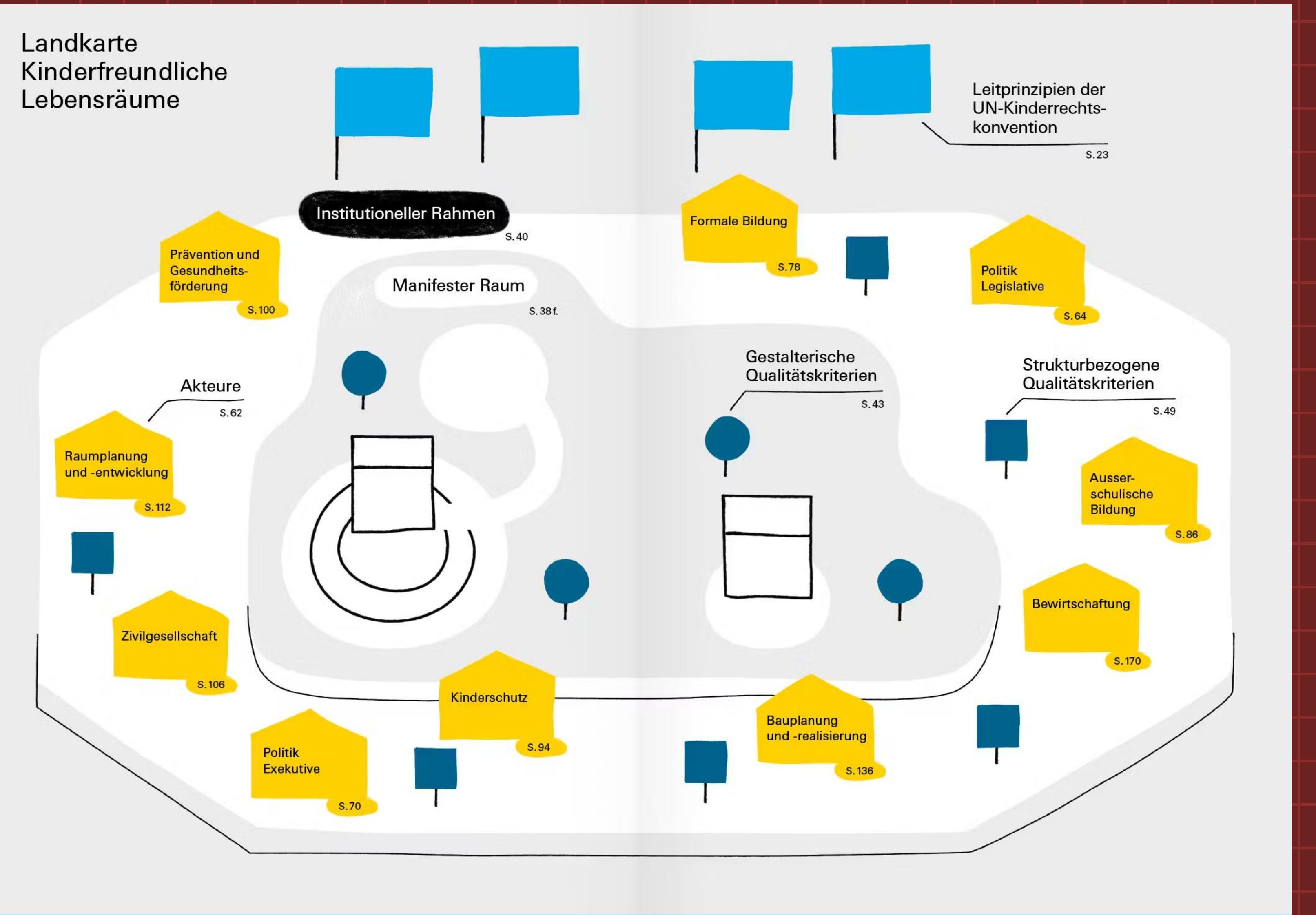
# Visualization for Communication





# Unicef Guide for Child-Friendly Living Spaces

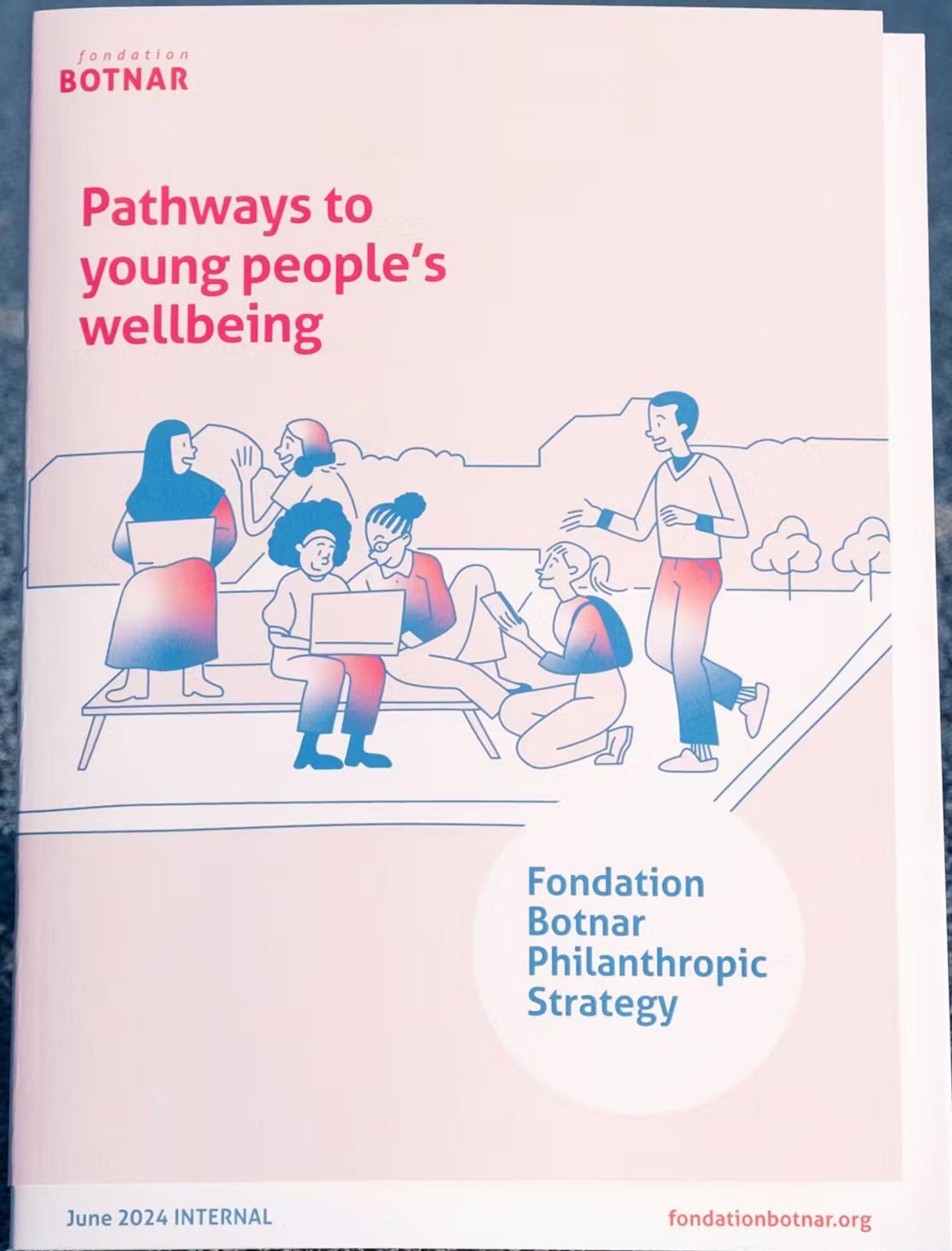
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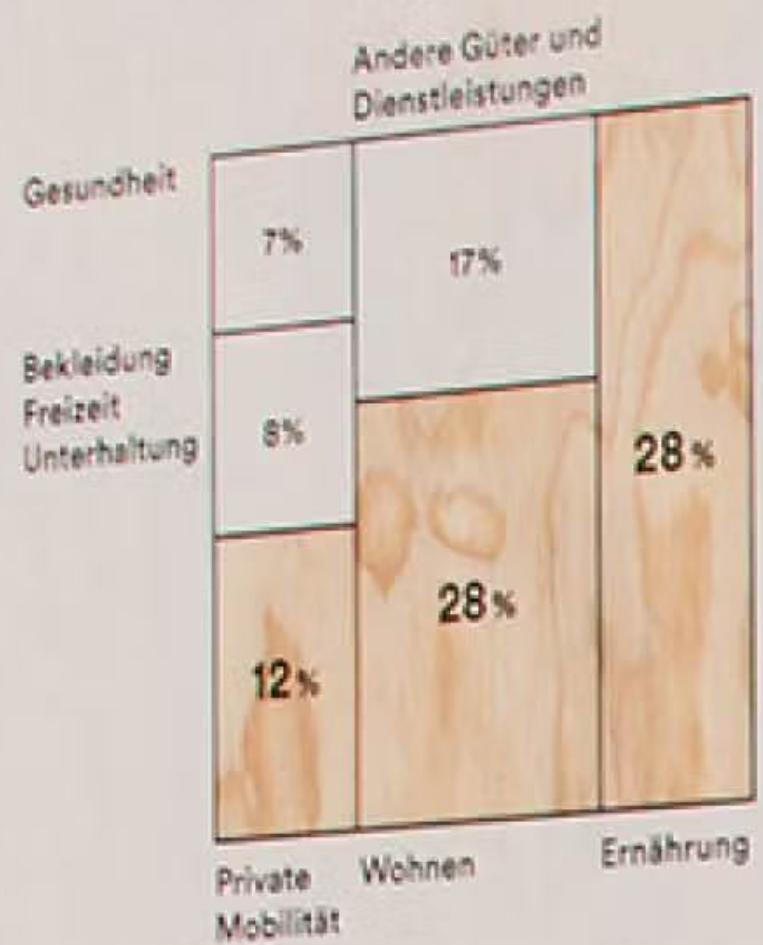
# Fondation Botnar

## Visualized Strategic Goals

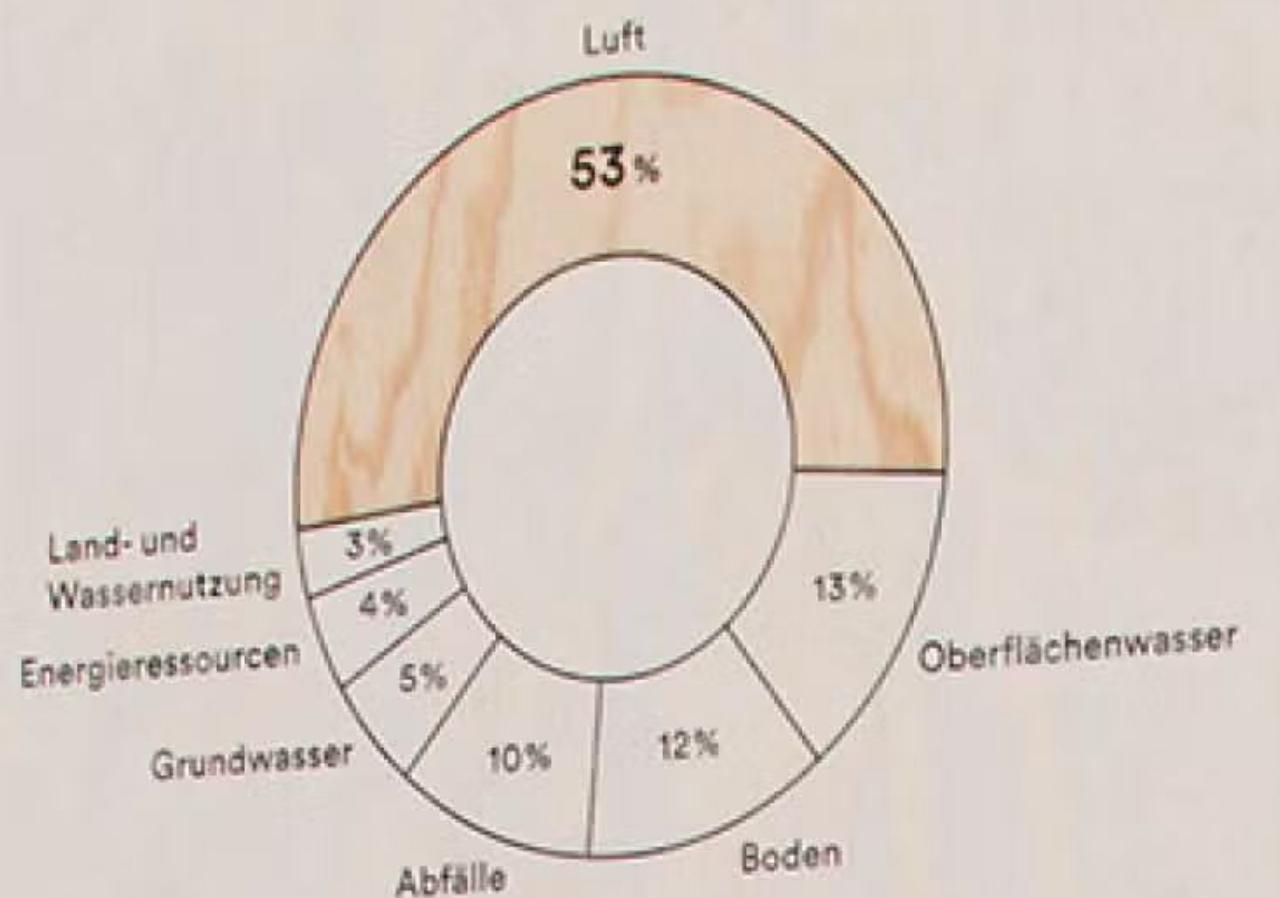
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## UMWELTBELASTUNG / BEREICHE



## UMWELTBELASTUNG / ART

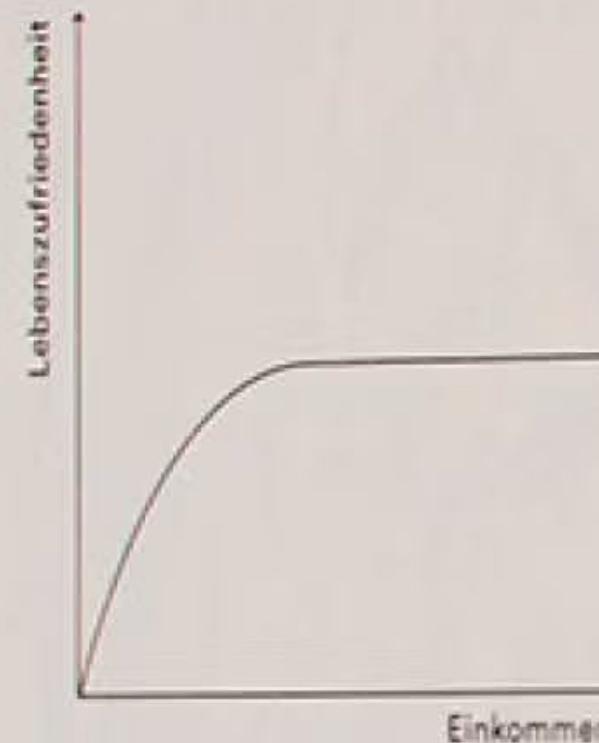


WIE VIELE FÜHREN UND WER HILFT? WIE VIELE WEGLICHE FÖRDERUNGEN SIND NOTWENDIG? WIE VIELE VERHALTEN IM BEREICH DER MOBILITÄT.

20483 KM PRO EINWOHNER/-IN DER SCHWEIZ SIND WIR JÄHRLICH UNTERWEGS.



## EINKOMMEN / LEBENSZUFRIEDENHEIT



© Superdot Studio

Die Glücksforschung zeigt:

## UMWELTBELASTUNG / CO<sub>2</sub> PRO PERSON / JAHR



## WIE SIND SIE AM LIEBTESTEN TÄGLICH UNTERWEGS?

