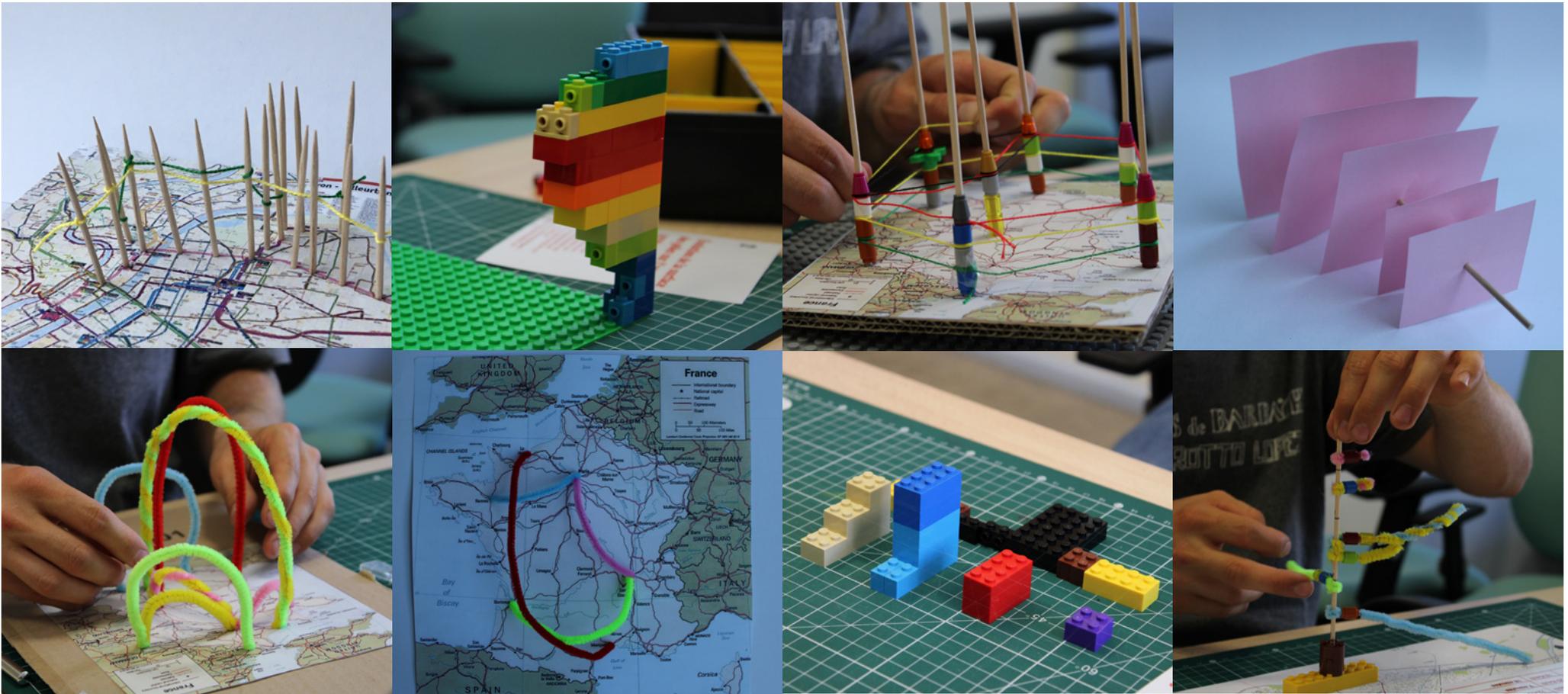


MATERIAL GUIDE FOR SPATIO-TEMPORAL PHYSICALIZATION



WHAT USES?



Preparation of a participatory physicalization workshop

As part of a project mobilizing spatio-temporal data, a research team wishes to conduct a participatory workshop allowing participants to express personal experiences and compare them collectively.

The first step is to choose materials appropriate for the exercise, and to anticipate the data to be physicalized during the workshop.



Tangible draft of a data visualization

Within the framework of a meeting around a project mobilizing spatio-temporal data, the team quickly builds a physicalization of the data on which it works in order to reflect more concretely on the directions to be taken.

OUR FAVORITE MATERIALS



Tokens
Legos - base bricks

Wooden rods
Skewer peaks - 30 cm
Toothpicks - 6,5 cm

Drawing pin

Cardboard

Iron wire

Paper / tracing paper
A4 80g colors
A4 90g tracing papier

Wires / strings

ASSEMBLY TABLE

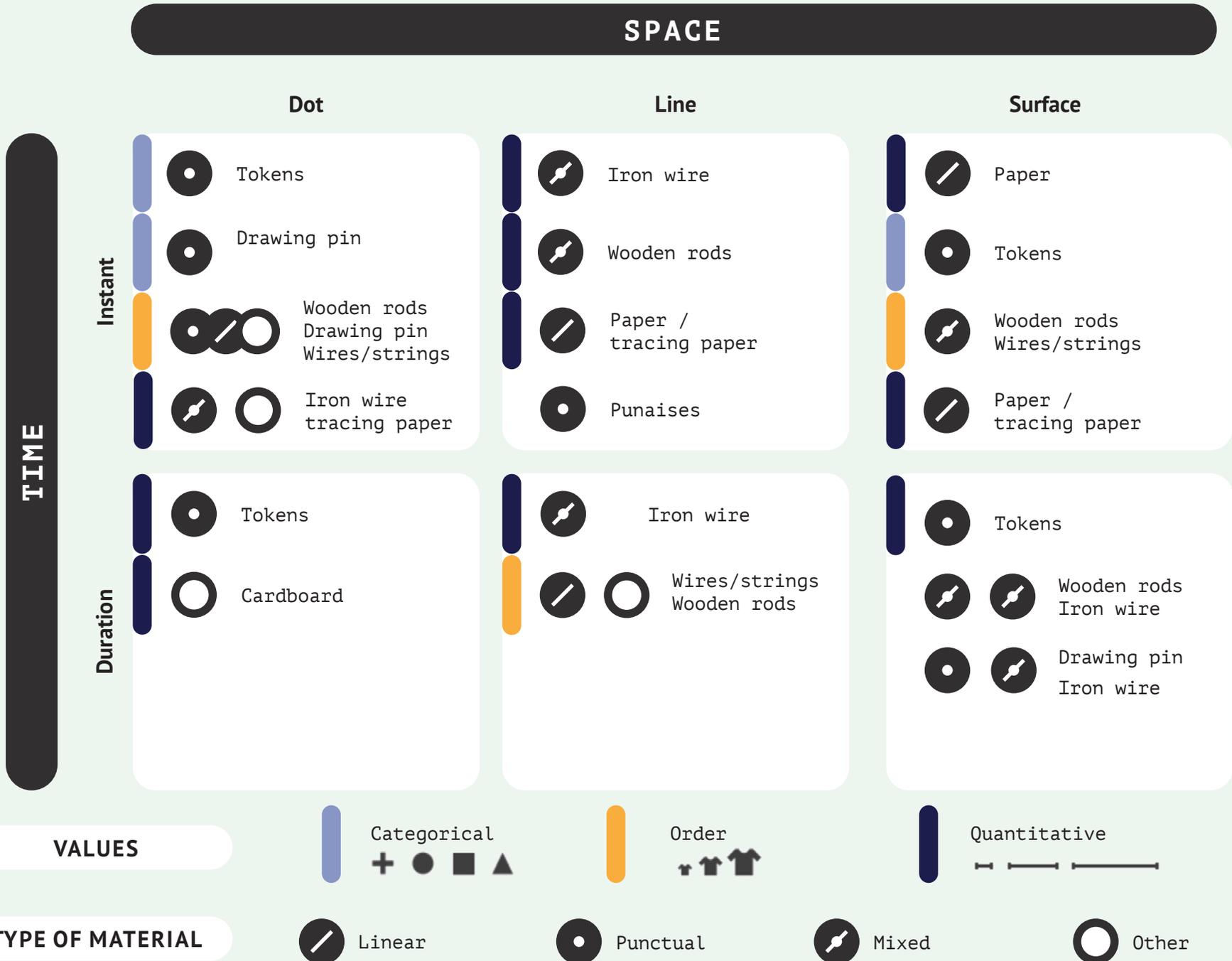


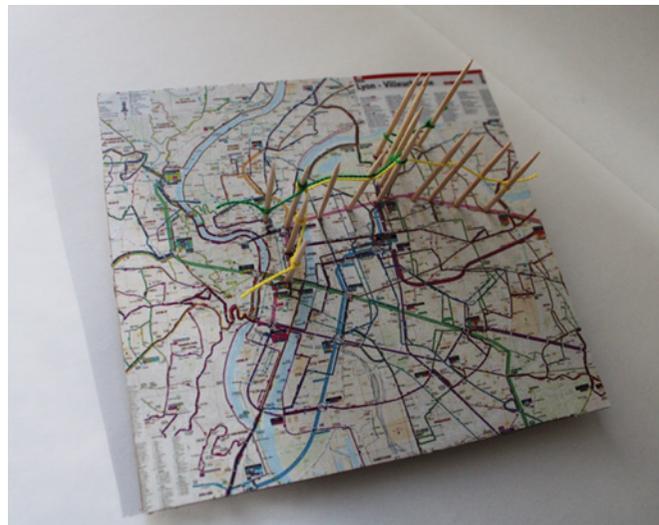
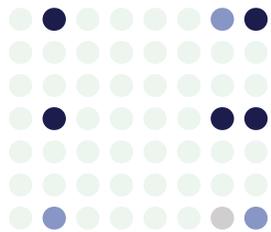
TABLE OF RECOMMENDED MATERIALS

		SPACE			TIME		VALUES		
		Dot	Line	Surface	Duration	Instant	Order	Categorical	Quantitative
	Wooden rods	Why not?	Recommended	Not recommended	Recommended	Recommended	Recommended	Why not?	Recommended
	Drawing pins	Recommended	Why not?	Why not?	Why not?	Recommended	Not recommended	Recommended	Why not?
	Paper / tracing paper	Why not?	Why not?	Recommended	Not recommended	Why not?	Why not?	Why not?	Recommended
	Iron wire	Recommended	Recommended	Why not?	Recommended	Why not?	Why not?	Recommended	Recommended
	Wires / strings	Not recommended	Recommended	Why not?	Why not?	Why not?	Why not?	Recommended	Recommended
	Tokens	Recommended	Why not?	Recommended	Why not?	Recommended	Not recommended	Why not?	Recommended
	Cardboard	Not recommended	Why not?	Recommended	Why not?	Recommended	Recommended	Not recommended	Why not?

Not recommended
 Why not?
 Recommended

RECIPES - trajectories

TABLE OF RECOMMENDED MATERIALS



Variable x trajectories

Representation of the evolution of a person's satisfaction over two of his or her daily trips.

The toothpicks make it possible to form two different routes (line space), materialized by yellow and green wires (category value).

These wires vary in height in order to project the degree of satisfaction of the person (quantitative value) who evolves in space.

TYPE OF DATA:

- line space
- category value
- quantitative value



Cardboard



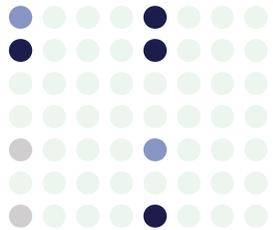
Wooden rods



Wires / strings

RECIPES - chronology

TABLE OF RECOMMENDED MATERIALS



Location x Instant

Representation of visited places, placed on a chronological time axis.

The vertical wooden axis is a temporal axis allowing to assign cities (point space) to one month (instant time). Here you can see the cities visited in recent months.

TYPE OF DATA:

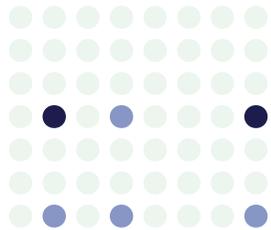
- dot space
- instant time

-  Cardboard box
-  Drawing pins
-  Wire
-  Wooden rod

RECIPES- speed



TABLE OF RECOMMENDED MATERIALS



Speed x trajectories

Representation of train travel time between different French cities.

The height (quantitative value) of the wire arches corresponds to the travel time (time duration) between two French cities (line space).

TYPE OF DATA:

- line space
- time duration
- quantitative value



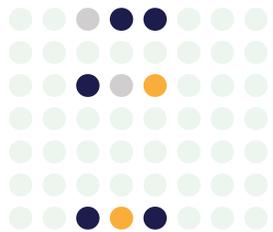
Cardboard



Iron wires

RECIPES- isochrones

TABLE OF RECOMMENDED MATERIALS



Surface x Moment

Representation of the distance that can be reached in 30 minutes from a given point at different times of the day.

The vertical wooden axis is a temporal axis allowing to assign reachable surfaces (surface space) in 30 minutes (duration time) to one hour of the day (instant time).

TYPE OF DATA:

- Surface space
- Time instant
- Time duration



Cardboard



Irons Wires



Tracing paper

Tokens

Legos - base bricks

Available in game / leisure shops

<https://shop.lego.com/fr-FR/product/Ensemble-de-briques-de-base-11002>

Iron wires

Available in game / leisure shops

https://www.creavea.com/lot-fil-chenille-multicolore-9-mm-x-30-cm-200-pcs_boutique-acheter-loisirs-creatifs_737218.html

Fils / ficelle

Available in supermarkets

Available in game / leisure shops

https://www.amazon.fr/Fil-pour-crochet-assorties-couvertures/dp/B01KVH23KG/ref=sr_1_49?_mk_fr_FR=%C3%85M%C3%85%C5%B-D%C3%95C3%91&keywords=fil+couleur&qid=1564071395&s=gate-way&sr=8-49

Wooden rods

Skewer picks - 30 cm

Available in supermarkets

<https://www.cddiscount.com/maison/art-de-la-table/lot-de-50-brochettes-bambou-30-cm/f-1179036-ibi8411922084924.html?idOffre=353372520#m-pos=3mp>

Toothpicks - 6,5 cm

Available in supermarkets

https://www.amazon.fr/IBILI-794100-Cure-Dent/dp/B011C1ITEE/ref=lp_3008164031_1_7?s=hpc&ie=UTF8&qid=1564071235&sr=1-7

Drawing pins

Available in supermarkets

<https://www.cddiscount.com/arts-loisirs/papeterie-fournitures-scolaires/punaises-couleur-10mm/f-1610304-map310011.html>

Cardboard

Recuperation

<https://www.cartonmarket.fr/product/lot-de-25-caisses-carton-21x16x-10cm/107175/>

Paper / tracing paper

A4 80g colored

Available in supermarkets

Available in game / leisure shops

<https://www.cultura.com/ramette-500f-a4-80g-ass-pastel-ramette-500f-a4-80g-ass-pastel-3329680170306.html>

A4 90g tracing paper

Available in supermarkets

Available in game / leisure shops

<https://www.rougier-ple.fr/poch.pap-calq-70g-12f.r.html>

