



phase D

Collaborative Design, Transformation and Testing

D.1 - Ancient monasteries as possible prototype

Lecturer: Luigi Bartolomei, Francesco Lipparini

D.2 - prototype as community engagement

build your prototype

Lecturer: Anna Szilágyi-Nagy

D.3 - sharing / testing prototypes session

it is your turn to lecture us!



Prototype as community engagement

by
Anna Szilágyi-Nagy



phase D, session n. 12

Collaborative Design, Transformation and Testing

AGENDA D.2

- Welcome, overview of previous lecture - 5 minutes
- **What is a prototype and how to do it? - 30 minutes**
- Build your prototype (Mural) - 30 minutes
- Sharing prototypes in plenary - 15 min
- Assignment and structure - 10 minutes

let's start !



What is a prototype?

physical manifestation of ideas that allows people to test and explore the technical and social feasibility of an idea



What is a prototype?

physical manifestation of **ideas** that allows people to test and explore the technical and social feasibility of an idea

we need...

> more shadow,
because there is too
much sunshine in the
school garden!

> we need a peaceful
corner to chill and
hang out!

a thought or suggestion
a possible course of action
aim or purpose





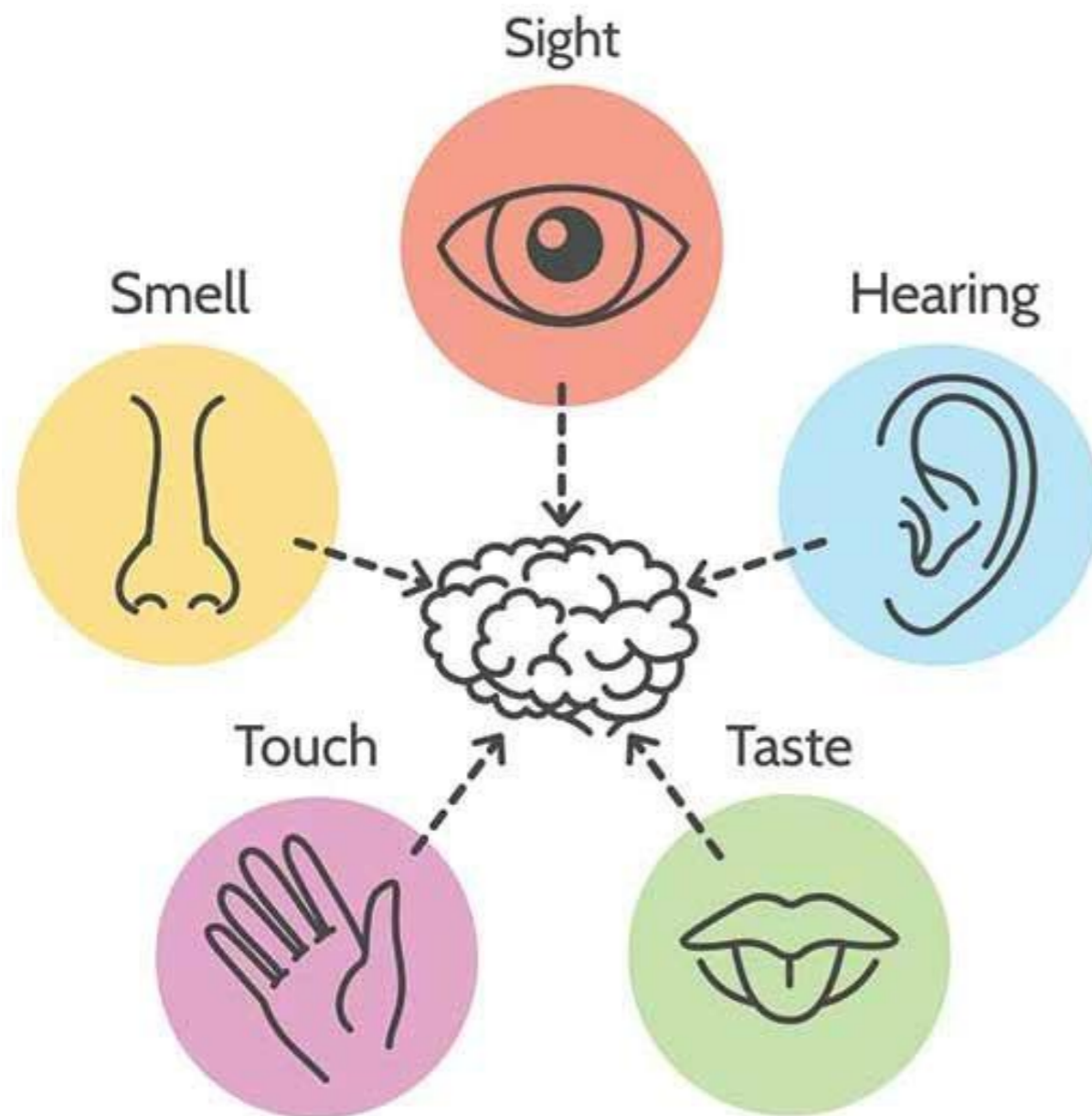
Let's make a pavilion / bench with shades / hammock hanging under the tree / etc. that provide shadow, seating opportunity for kids to hang out!



What is a prototype?

physical manifestation of ideas that allows people to test and explore the technical and social feasibility of an idea

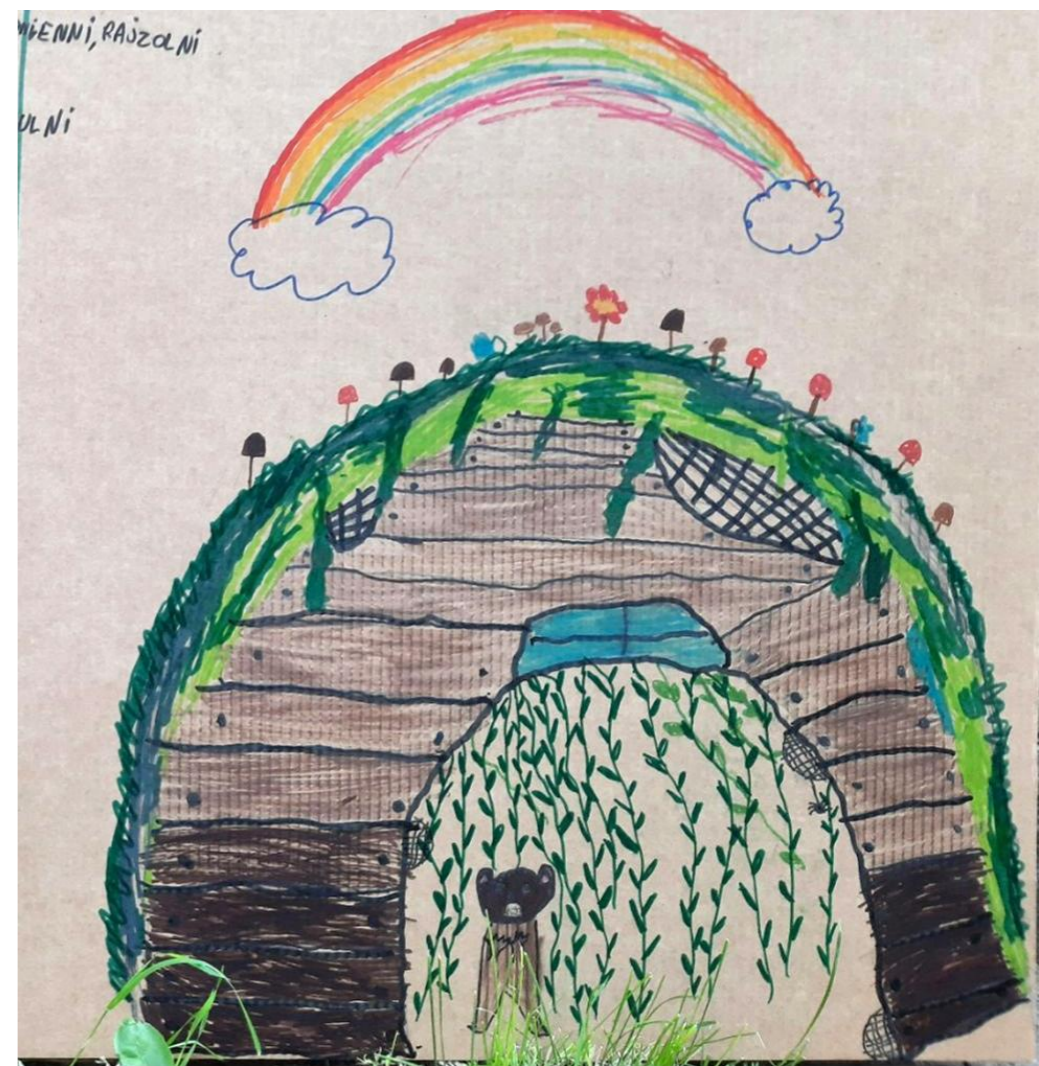
perceived through the senses
tangible or concrete
can involve bodily contact or activity



- + sight
- + smell
- + hearing
- + touching
- + tasting
- + movement
- + balance
- + interoception

Image source:

<https://images.ctfassets.net/4yflszkpcwkt/7sT0K21ZL81ky4k5YZhZ67/c13fb05a0ad6d30393f01d529e9fda22/FxX5caie56ynm27UafJo4uLsYqjXh4AGMRyGMkcaRAWLoAz8Bh7yST6hvZokKPzGmuZa8B3Kk1dAxywrjw4k4pz7zpx9at4d2GFVwQWVNhka>





Red circle
Yellow circle
Green circle

MIX 52
MEER

SZABALYOK
NEMTUDJAM HANOSZAR...
MOMENTANOSAN...
SADONAT-PI...
TANOSZAS...
FATONAS...
VIZ...
TOYOTA PARTS

BEHŰGŰ
A TOLNAI...
CSENY...
TŰR...
KIVUL...
Drawing of a house with a rainbow, sun, and beehive.



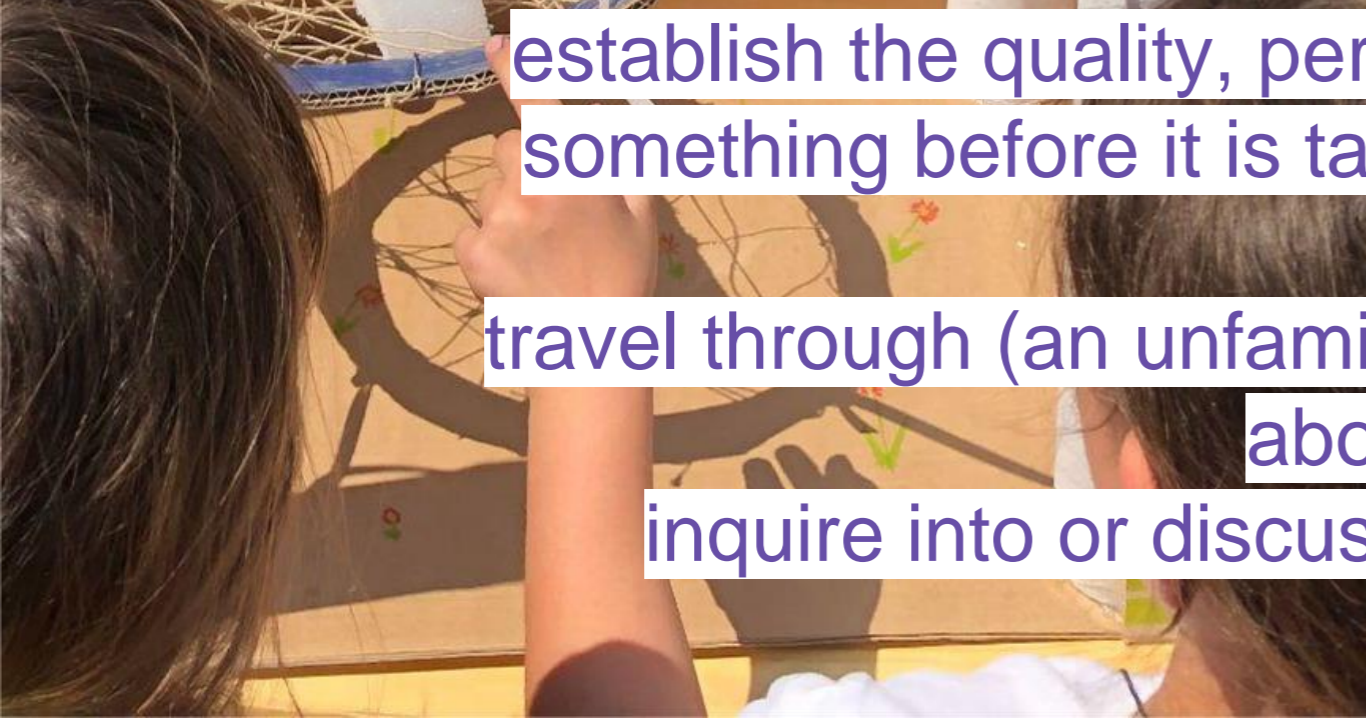


What is a prototype?

physical manifestation of ideas that allows people to **test** and **explore** the technical and social feasibility of an idea

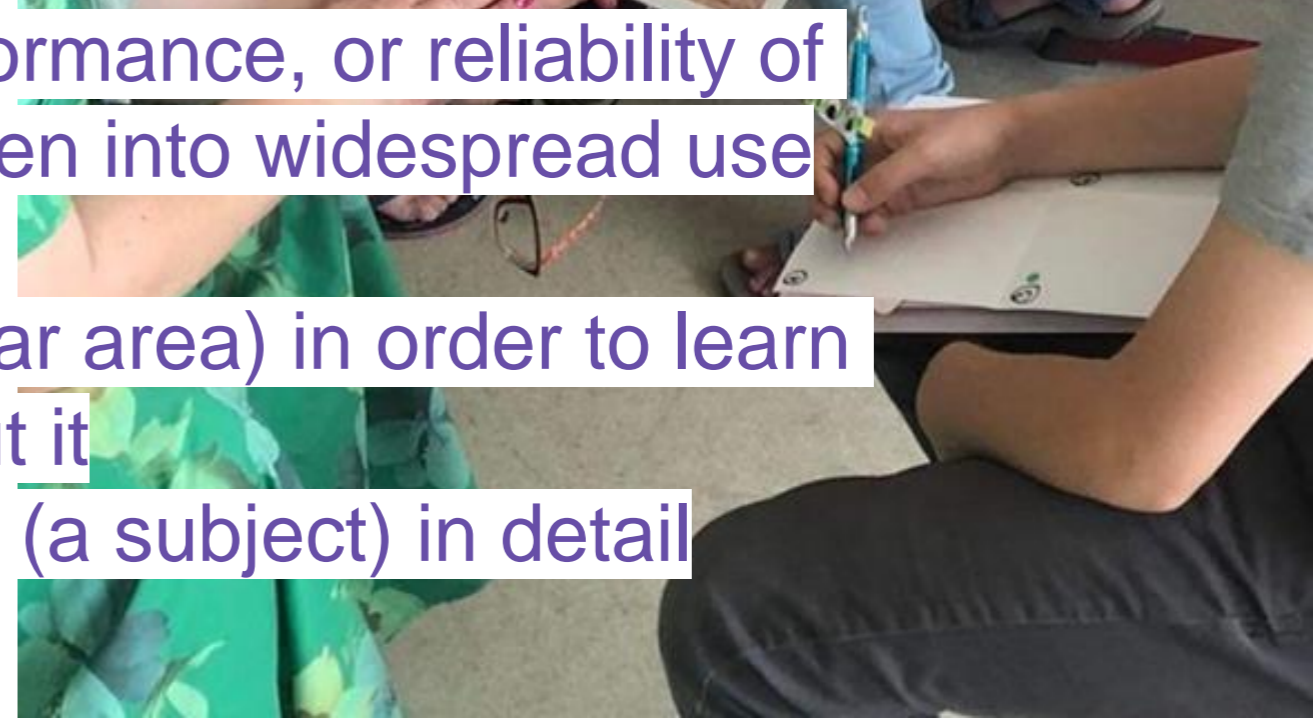


establish the quality, performance, or reliability of something before it is taken into widespread use



travel through (an unfamiliar area) in order to learn about it

inquire into or discuss (a subject) in detail

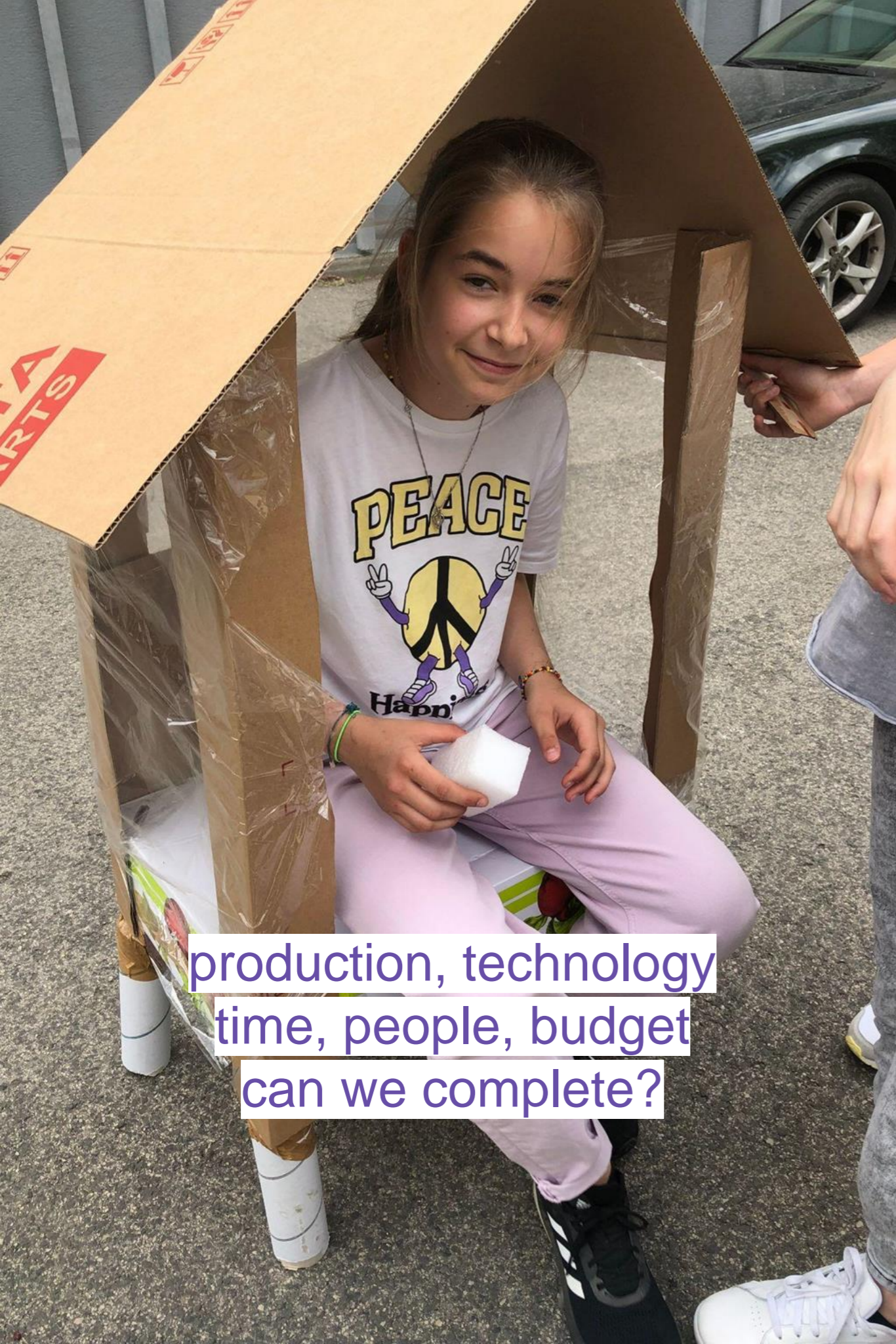




What is a prototype?

physical manifestation of ideas that allows people to test and explore the **technical** and **social feasibility** of an idea

how one interacts with others within a system or an organization



production, technology
time, people, budget
can we complete?

impact on individuals, groups, use
of space, routines, relationships
public goods, education, health...



Why do we need Prototypes?

in the low-risk phase

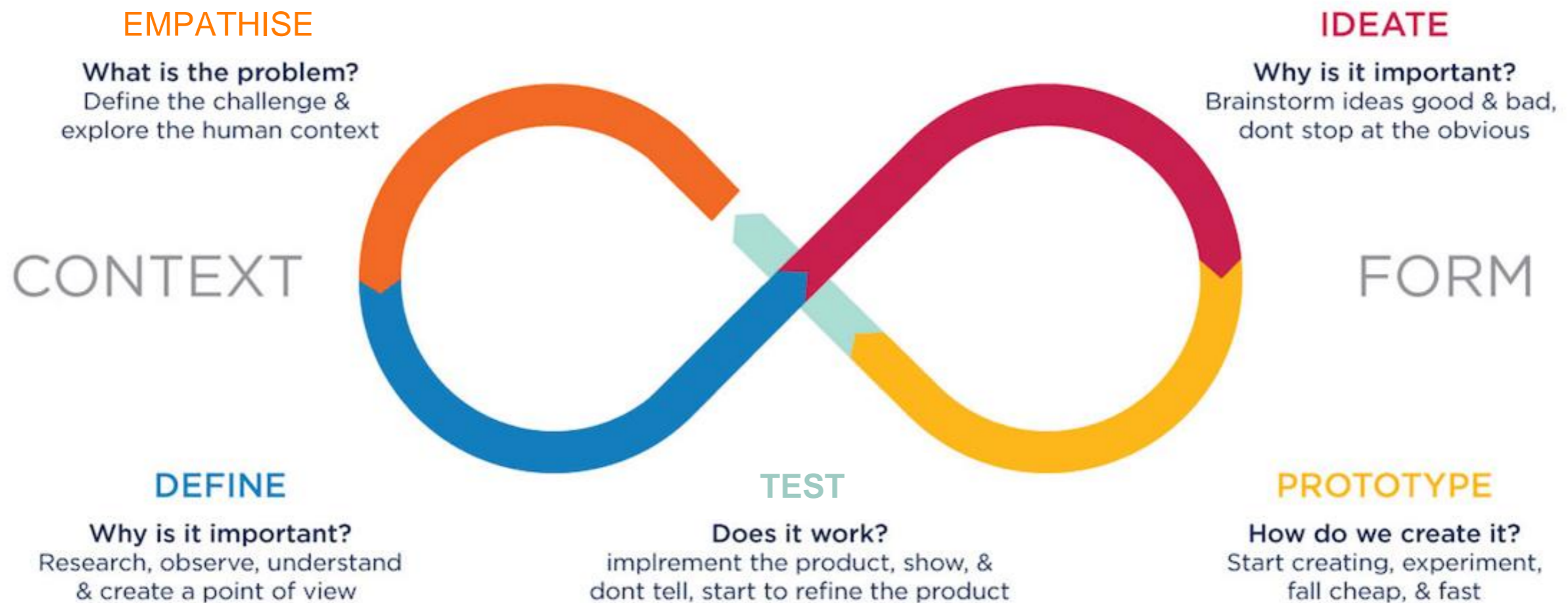
- **test** designs and ideas
- **see** how people use the design
- **understand** their experiences
- **collect** feedback
- **develop** the design further based on feedback
- **refute** assumptions
- **ensure** the design concept works
- **generate** shared understanding



The Prototyping Process > Iterative



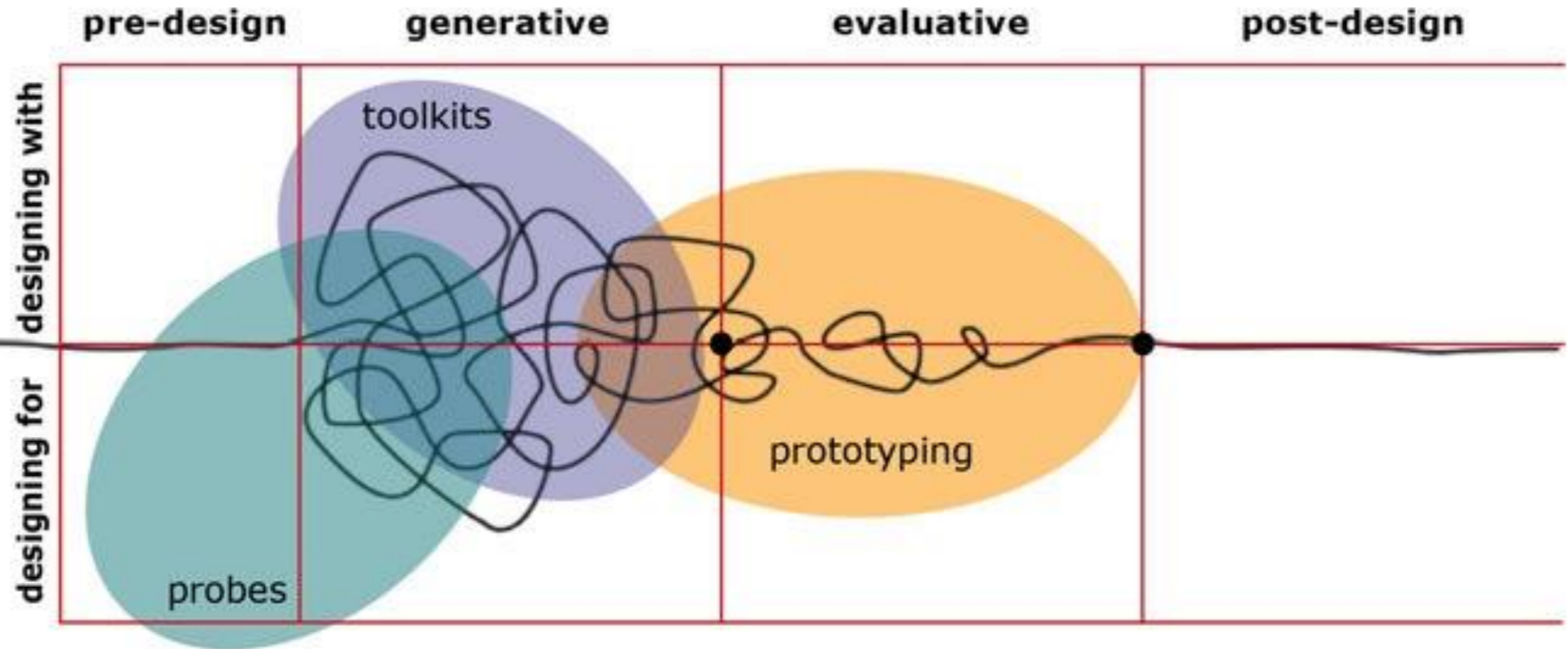
Prototype > Test > Feedback > Iterate > Test > Feedback ...





What makes prototypes different from other 'making' activities in a co-design process?

Prototypes as a form of making are used in the evaluative phase of design



Three approaches to making located along the timeline of the design process (Elizabeth B.-N. Sanders and Pieter Jan Stappers, 2013)

Probes: tools that participants use remotely (e.g. polaroid camera) to inspire design

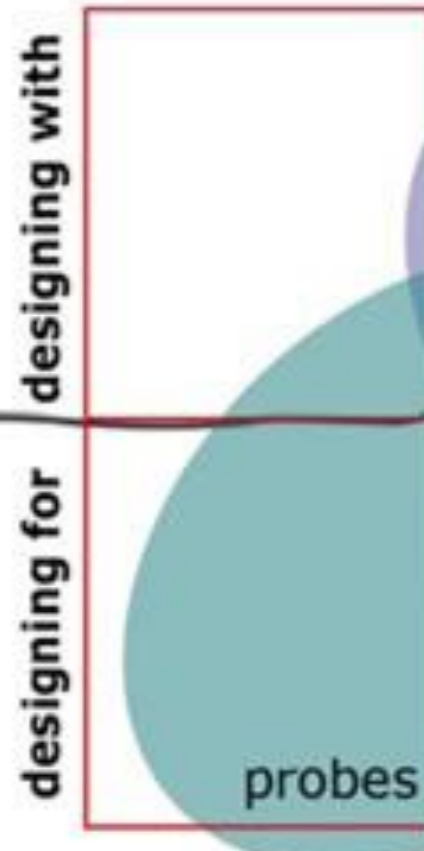
Toolkits: materials with instructions that generate (design) ideas during workshops

Prototypes: physical manifestation of ideas (e.g. models, scenarios)

user as subject

What is the context of people? What do they feel, experience, dream?

pre-design



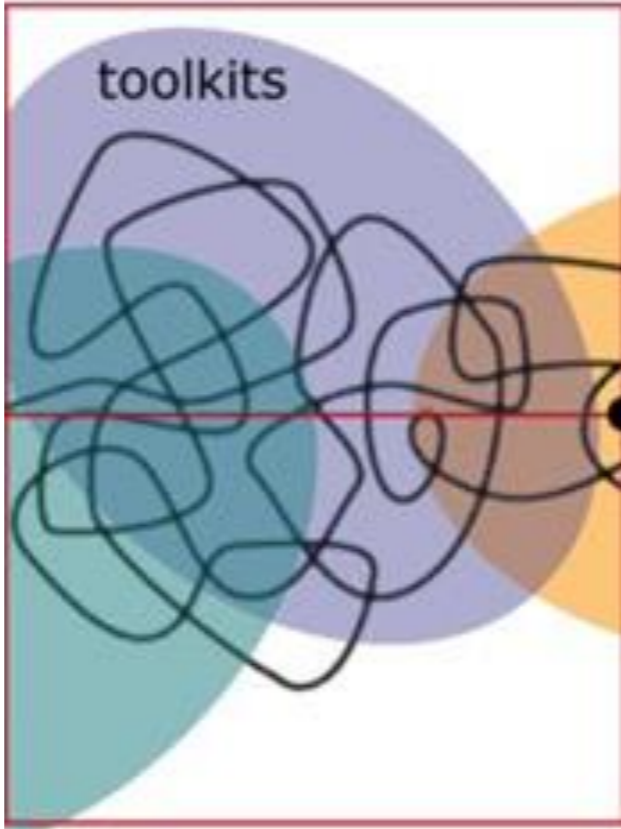
Probes / engagement tools for inspiration

- tools that participants use remotely and asynchronous without facilitation (e.g. polaroid camera, diaries, workbooks, etc.)
- designers create them
- people reflect on and express their experiences, feelings and attitudes in forms and formats that provide inspiration for designers
- results are sent back to the designer



user as partner
generative

What will be useful? Usable? Desirable?



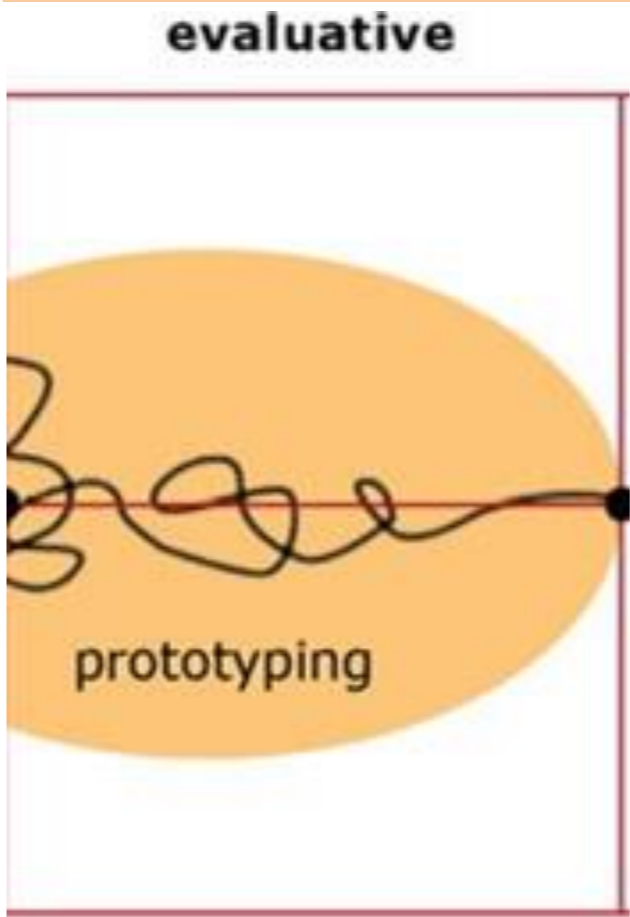
Toolkits / engagement tools for ideation

- tools that participants use during facilitated collaborative activities (toolkit can include pictures, words, phrases, blocks, shapes, buttons, wires, etc.)
- designers and researchers create them
- people (non-designers) use the participatory design language of the toolkit to imagine and express their own ideas about how they want to live, work, play, etc.
- results are (artefacts and descriptions or enactments of their use) can be analysed to find underlying patterns.



Is the concept useful? Usable? Desirable?

user as subject and as partner



Prototypes / physical objects for testing

- physical manifestation of ideas that allows people to test and explore the technical and social feasibility of an idea (e.g. clay, foam, wood, plastic, simple digital and electronic elements)
- codesigners create them
- people (designers and non-designers) envision their ideas and display them to get feedback on these ideas from other stakeholders
- results are visualisations (e.g. scenarios, storyboards, models, etc.)

The Design Process > 'Making' during different Phases

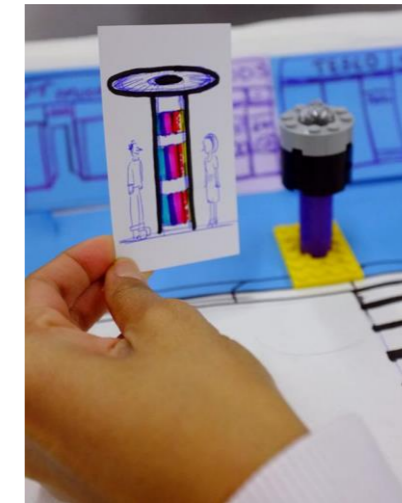
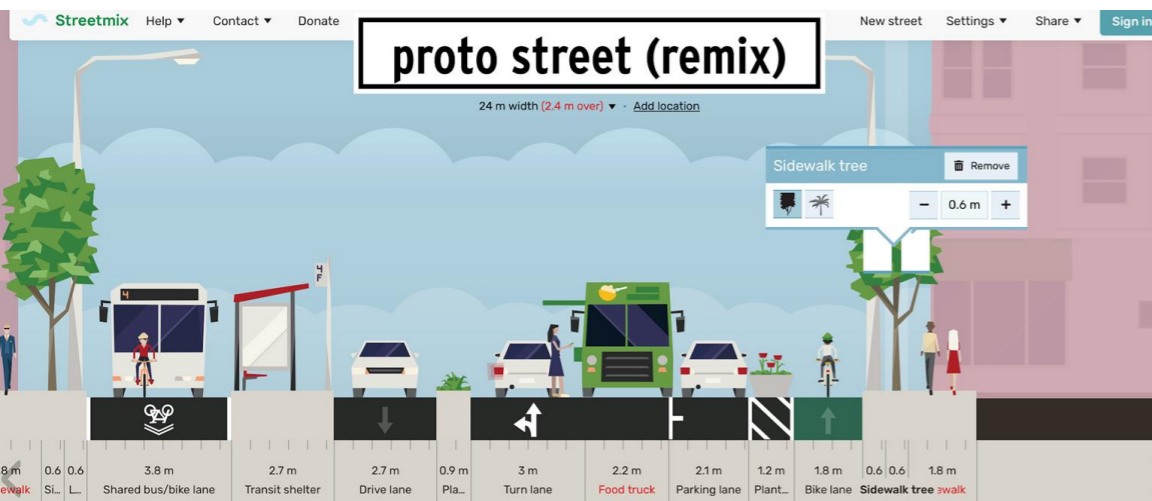


Design Phases	Pre-Design (---> Generative)	Generative (---> Evaluative)	Evaluative
'Making'	Probes (for inspiration)	Engagement Toolkits (for ideation)	Prototypes (for testing)
What?	Objects which provoke or elicit response. E.g: a postcard without a message, or a polaroid camera to use remotely	Specifically designed for each project's context. Participants use the toolkit components to make artefacts (eg: model a neighbourhood, or make a map...etc)	Prototypes are physical manifestations of design ideas and concepts. They range from rough ones (giving an overall idea only) to testing the actual design (high fidelity ones)
Why?	To find inspiration in participants' reactions and gain insight into their lives and values	To give participants means (tools) with which to participate in the co-designing process	To give form to an idea, and to explore feasibility, get insight from participants
From what (materials)?	Examples: diaries, workbooks, polaroid cameras with instructions, etc.	Toolkits are made of a variety of components, Eg: pictures, words, phrases, blocks, shapes, buttons, wires, etc.	Can be made from a very wide array of materials, eg: paper, clay, foam, wood, plastic, simple digital and electronic elements.
Who uses?	The probes are sent out to participants often with little or no guidance – so it can be creatively and provocatively used, and then sent back to the designers	Toolkits work with individuals or small groups. The process is normally facilitated. Participants use the toolkits to imagine and plan for the future, for change <i>(Elizabeth B.-N. Sanders* and Pieter Jan Stappers, 2013)</i>	Designers create the prototypes to envision their ideas, to display and to get feedback from participants



**What types of prototypes do you use to test
your (design) ideas
in landscape architecture?**

Familiar formats but using them for testing ideas and receiving feedback!

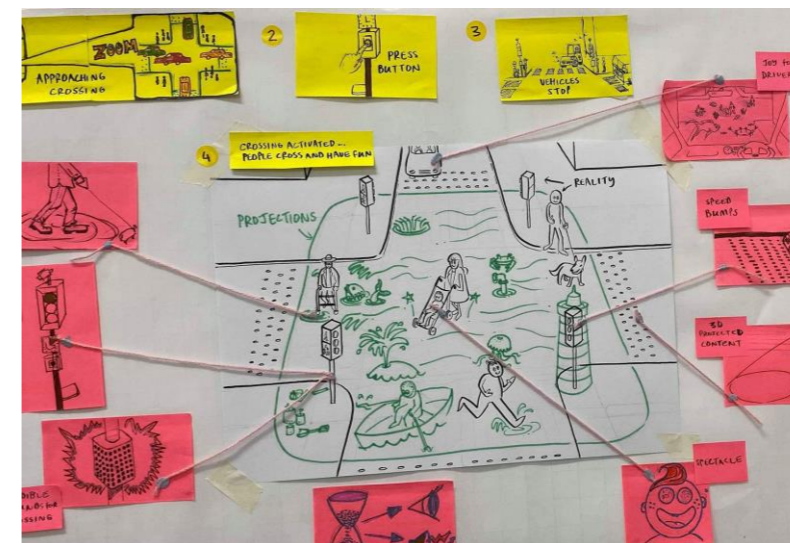


modifiable digital models e.g. streetmix or Minecraft or analogue models e.g. 'Colorful Community, Govanhill'



more complicated formats such as 3D games e.g. 'Participatory Chinatown' in blended engagement event
Augmented reality as conversation triggerer during site walks, e.g. 'Billeniar square'

Check out ideas for low fidelity and high fidelity prototype ideas for the [prototype bank!](#)



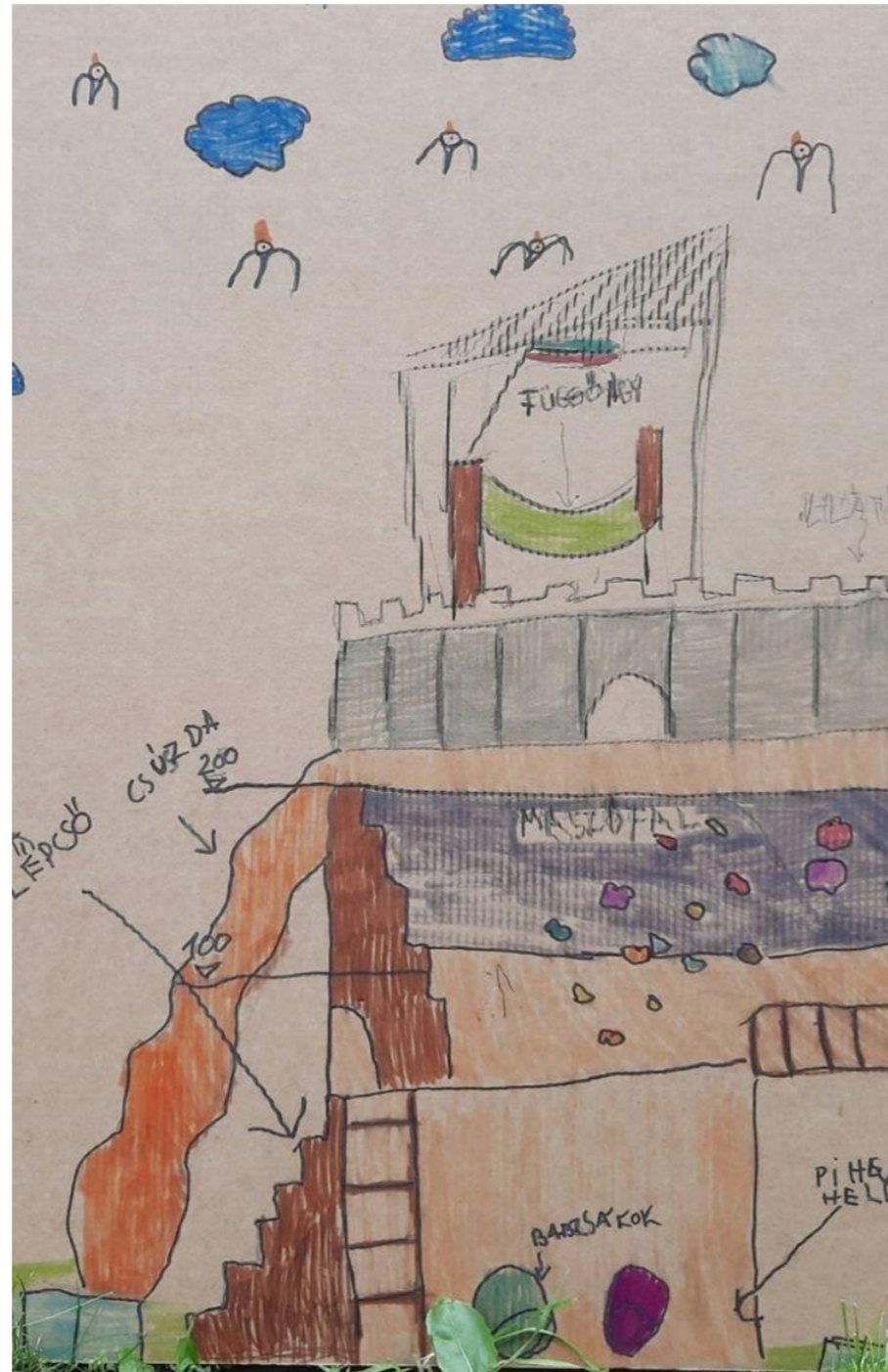
mind maps, storyboards, gifs, ppt, sketches, etc. e.g. collage with children engagement in Törökbálint, comic books at Waterplaza Rotterdam, Performative prototyping for pedestrian crossing design, Glasgow



how to do it?

Low-fidelity Prototypes

- Cheap, tangible
- Quick representations of ideas
- Test functionality
- For rapid experimentation





High-fidelity Prototypes

Appear and function as similar as possible to our design

Portland, Oregon, USA



<https://bikeportland.org/2016/02/11/a-closer-look-at-the-better-broadway-pop-up-protected-bikeway-174752>

Melbourne, Victoria, Australia



<https://www.vicroads.vic.gov.au/traffic-and-road-use/cycling/pop-up-bike-lanes>



1. Design / build prototype:

- **Quick ideas**
- **Cheap design**

Don't get emotionally attached to your ideas

Pros: quicker + easier to modify if needed

Examples: storyboard, paper cutout, miniature model, performance

- **Empathise**
Design/build with the Participant in mind
- **Create an engaging / interactive experience**



2. Testing the prototype:

- **Ice Breaker!**
to create trust and a safe place
- **What are the roles?**
who is facilitating, taking notes, documenting?
- **Plan your questions**
What do you want to understand?
- **Document**
the use and feedback
- **Consent forms**

1. Consent Form:

- Vulnerable context
(eg. young people)
caretaker's or parents consent
- Communicate participant rights
- Anonymity
do participants wish to remain
anonymous in the documentation?
- Agreement to their responses being
used
- Data storage and disposal
GDPR policy



2. Unexpected questions

3. Ethical documentation

(e.g: do they agree to their photos being taken?)

4. Power dynamics

‘Ladder of participation’

Are you a Facilitator?

Are you a Participant-Observer?

What is your role? (co-design vs co-creation)

5. Open-ended design

to encourage interaction and feedback





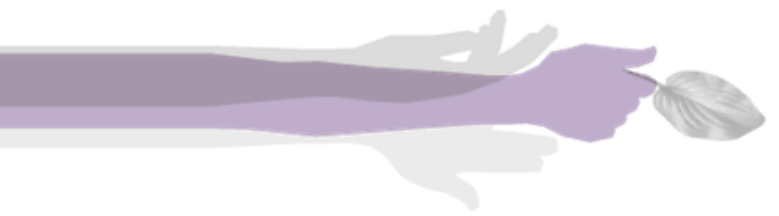
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30 min mural exercise + 15 min sharing



CHOOSE THE ACTION / DESIGN TO BE TESTED!

(10 min)

Review Step 7 in the Nominal Group Technique Practice. Choose what action / design idea you want to test with a prototype!

First, gather your ideas individually on a post it!

Then, share your own ideas with the group.

Discuss and decide which action or plan you want to test. If necessary, you could also organize a voting session.

The image shows a screenshot of a mural exercise. On the left, there is a grid of colorful sticky notes organized into columns and rows. On the right, there are six black boxes arranged in a 3x2 grid. Each box contains the text: "I would like to test the following action or design idea with a prototype:". A large white plus sign is centered in the bottom right corner of the grid.

FORMULATE THE PURPOSE OF THE PRORTYPE!

(5 min)

Now that you have selected the action / design to be tested, it is time to formulate the purpose of the prototype! Each team member should complete a post it about what they would like to know about the action / design selected in the previous exercise. Also state who you would like feedback from and where the testing will take place. Agree on a scenario!

The image shows a screenshot of a mural exercise. It features a 2x3 grid of black boxes. Each box contains a template for a purpose statement: "With this prototype I want to understand (WHAT) about (the ACTION/DESIGN selected) and test it (WHERE) with (WHOM)".

DESIGN YOUR PROTOTYPE!

(15 min)

What kind of prorotype will help answer your question? (prototype + interview, prototype + observation, etc.) Think with the group about the material of the prototype, the interaction it has with the target group, and at what event you use your prototype? Visualize your ideas with icons, images found on the web, arrows here!

Show the visualization in the plenary!

<https://app.mural.co/t/kulturaktiv6589/m/kulturaktiv6589/1654587804972/5c1376460ec9b8ecefefeb212e6c3907c9760d90db?sender=u4ff30346caf8feb2e24f1261>



now we sort you into breakout rooms!

<https://app.mural.co/t/kulturaktiv6589/m/kulturaktiv6589/1654587804972/5c1376460ec9b8ecefefeb212e6c3907c9760d90db?sender=u4ff30346caf8feb2e24f1261>

Breakout 1

Breakout 2

Breakout 3

Breakout 4

Breakout 5

Breakout 6

Breakout 7

Breakout 8



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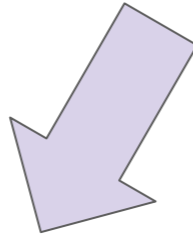
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Prototyping as engagement - Test your design idea with a prototype!



Your task is to create and test a prototype with the target group of your choice at an event of your choice! Gather people's feedback during testing and incorporate it into the design process. You have two options for doing your assignment:

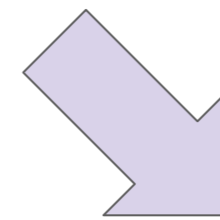
Option A



If you had prototype testing with your community, report what it was like!

use **ppt**
template for D.3
sharing

Option B



If you haven't had prototype testing with your community, get ready for it through a role play!

use **mural**
template for D.3
sharing



To sum up - How to proceed with this assignment?

Step 1 - during D.2 session you will develop your research question within your group and build the first version of your prototype.

Step 2 - during D.3 introduce your prototype to the others. You have two alternatives to select from:

A) you had the chance to test it with your community. In this case you introduce the results of the testing. Simply follow the instruction of the ppt template.

https://docs.google.com/presentation/d/1MvYL8-sQtNCnYdN-pniMTNmg3JYFr3c0TifM1M3h9Wg/edit#slide=id.gd7b33e2427_0_0


OR

B) you had no chance to test it with the community. In this case, follow the description in mural and prepare a role playing game in which your audience plays the role of your selected community. Test your idea and collect feedback.

<https://app.mural.co/t/kulturaktiv6589/m/kulturaktiv6589/1654601277632/87495805fd248c27c1378d46e994c5d4e1d0bc74?sender=u4ff30346caf8feb2e24f1261>

Step 3 - Use the slides or your mural to upload your results to the ledwiki.

Enjoy!



Check out ideas for low fidelity and high fidelity prototype ideas for the [prototype bank](#)!

Prototype bank

Get inspired! I. - low fidelity paper prototypes

Get inspired! II. - high fidelity and digital prototypes



phase D

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D.2 - prototype as community engagement

build your prototype

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