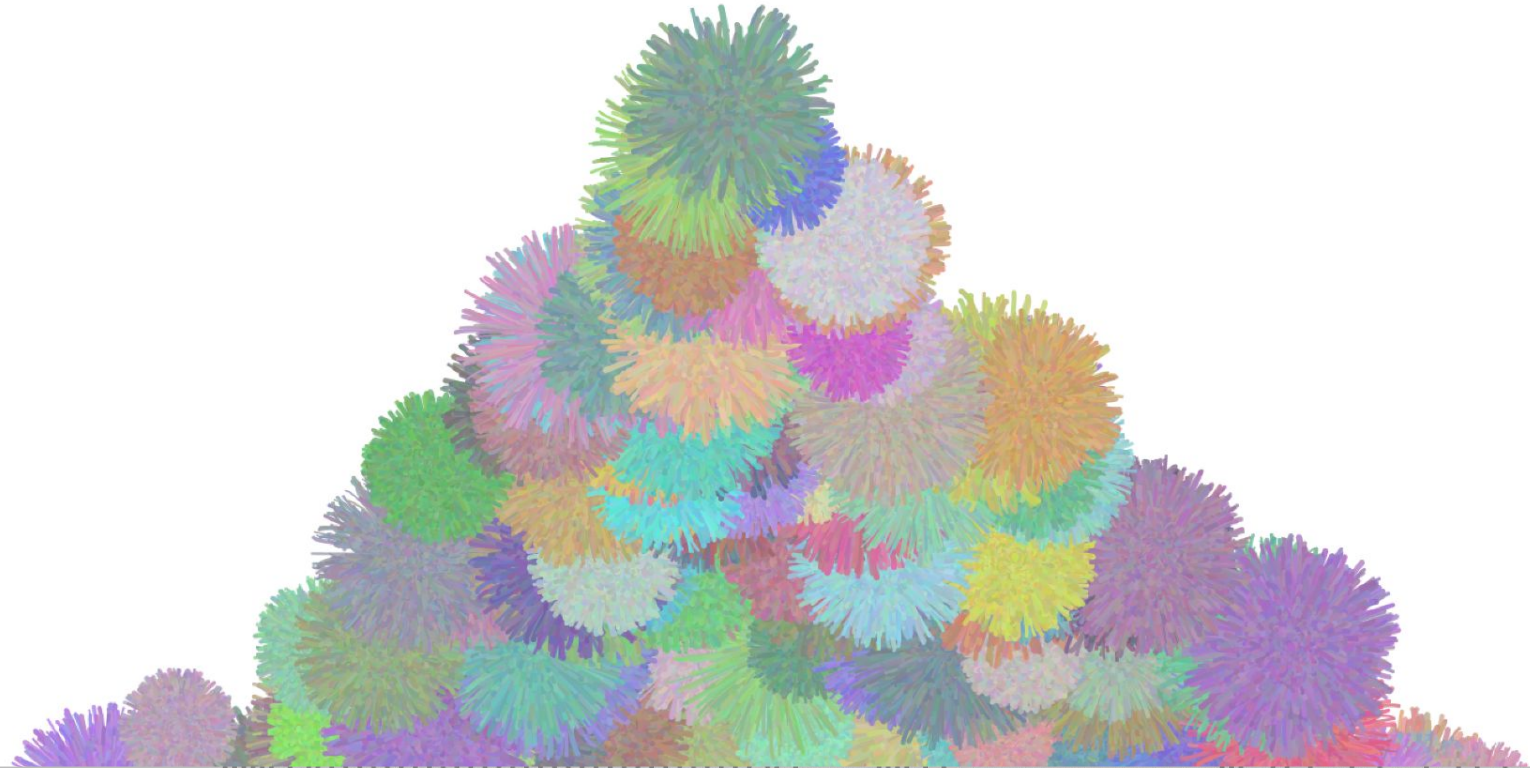


# not yet invented

design space, ideation and brainstorming



not yet invented

3  
mins



# media from the past

think about ancient past, the last century, discarded media

3  
mins



## media you use now

think types of media have you used recently, both consume and create

3  
mins



# futuristic media

think films, sci-fi, books, comics

3  
mins



## unrelated object + place/space

two or more post-it notes, any object ok, any place or space ok!

3  
mins

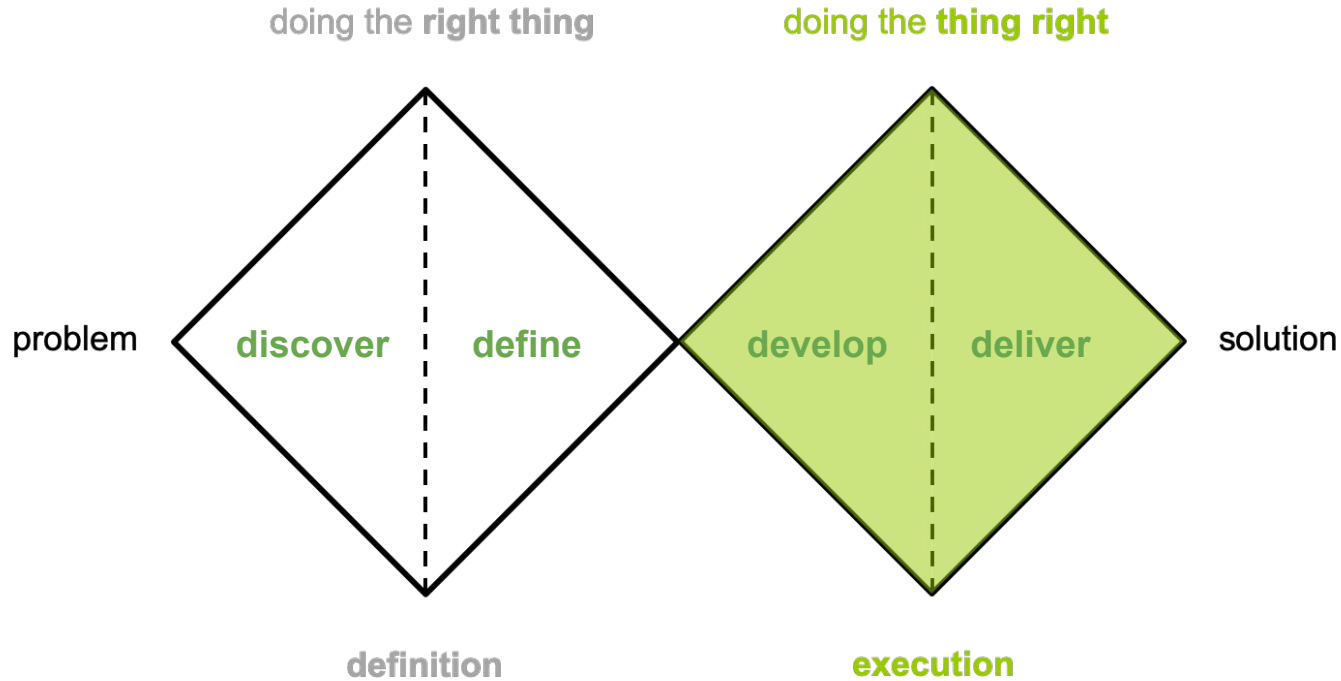


# available materials

what do we have in the room to work with?

# the plan today

- By lunchtime... think up a **new form of computational media!**
- It has to fit the brief:
  - That it is **interactive**
  - That it has **sensing / has sensors**
  - That it can **draw (loosely speaking!)**
- A simple task? Or do we need some structure?

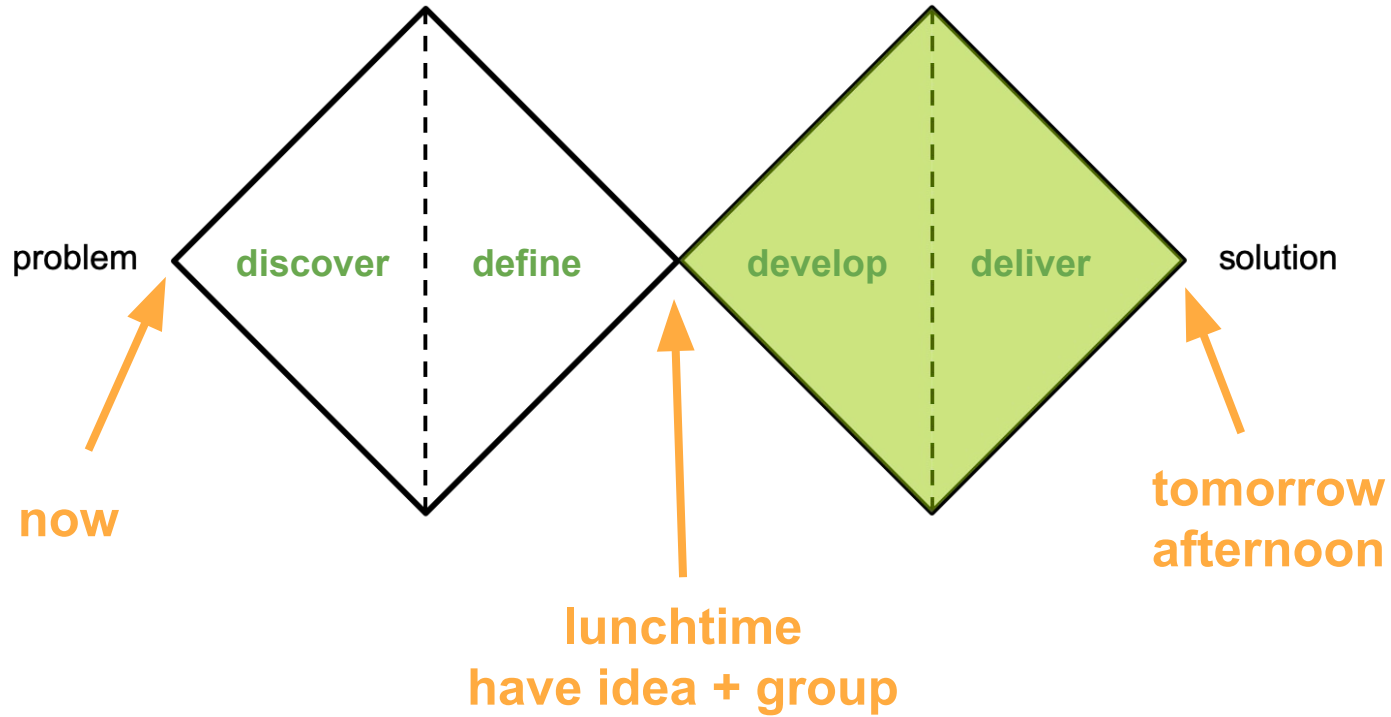


## Double Diamond

A way to conceptualise the process of design, involving divergent and convergent thinking.

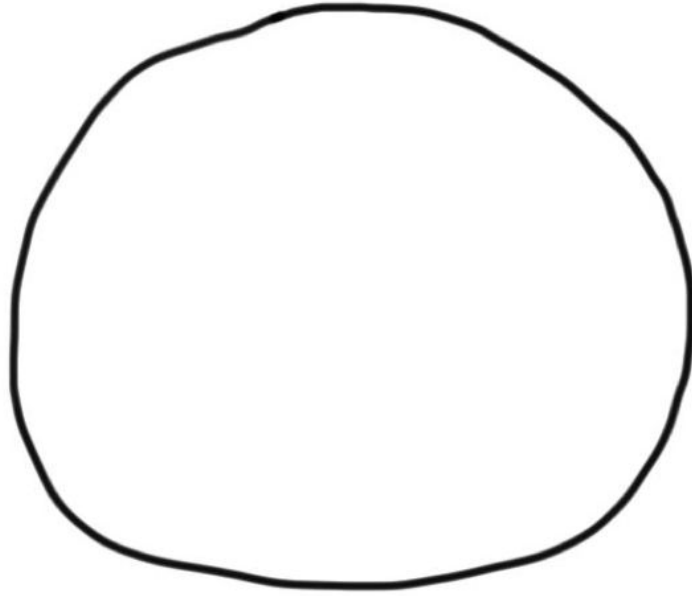
<https://www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond>



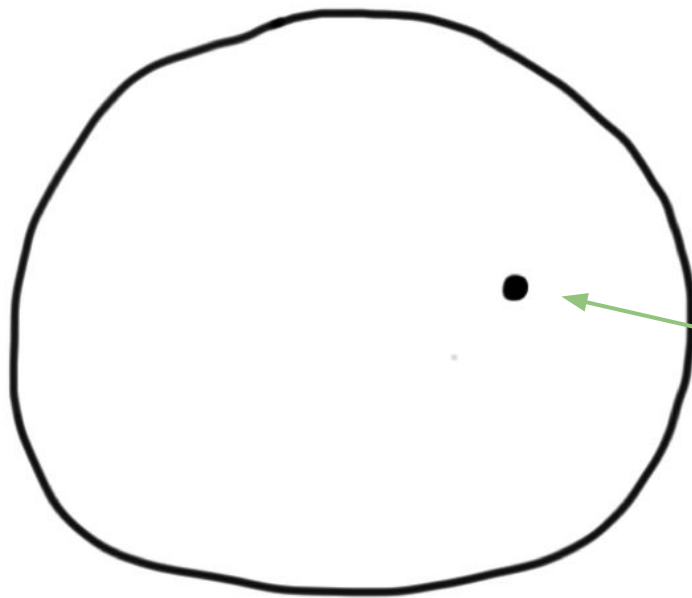


# Design Space

.... how to navigate through endless design possibilities  
and never get stuck for an idea ever again

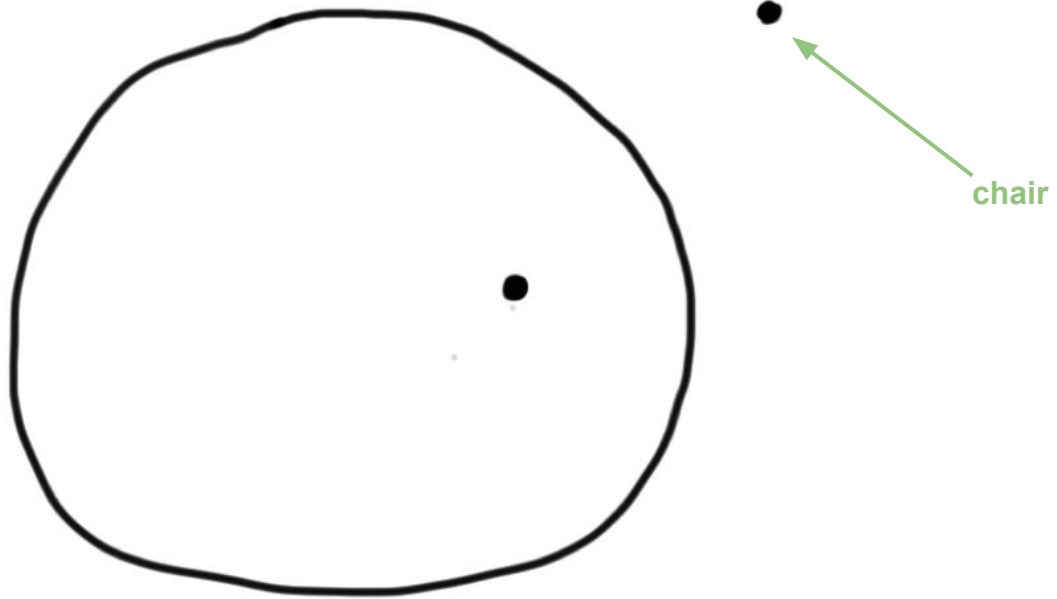


start by setting the brief, say "**design a new device for drinking tea**" - this is your design space

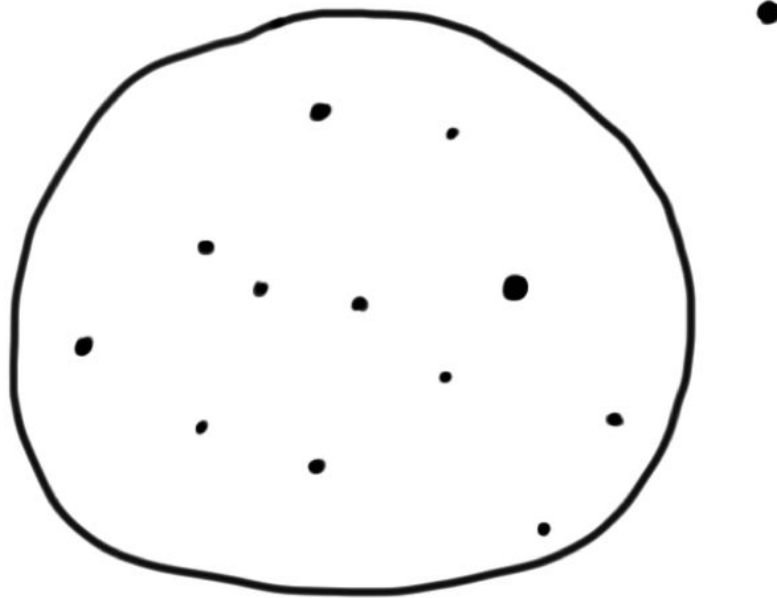


ceramic mug

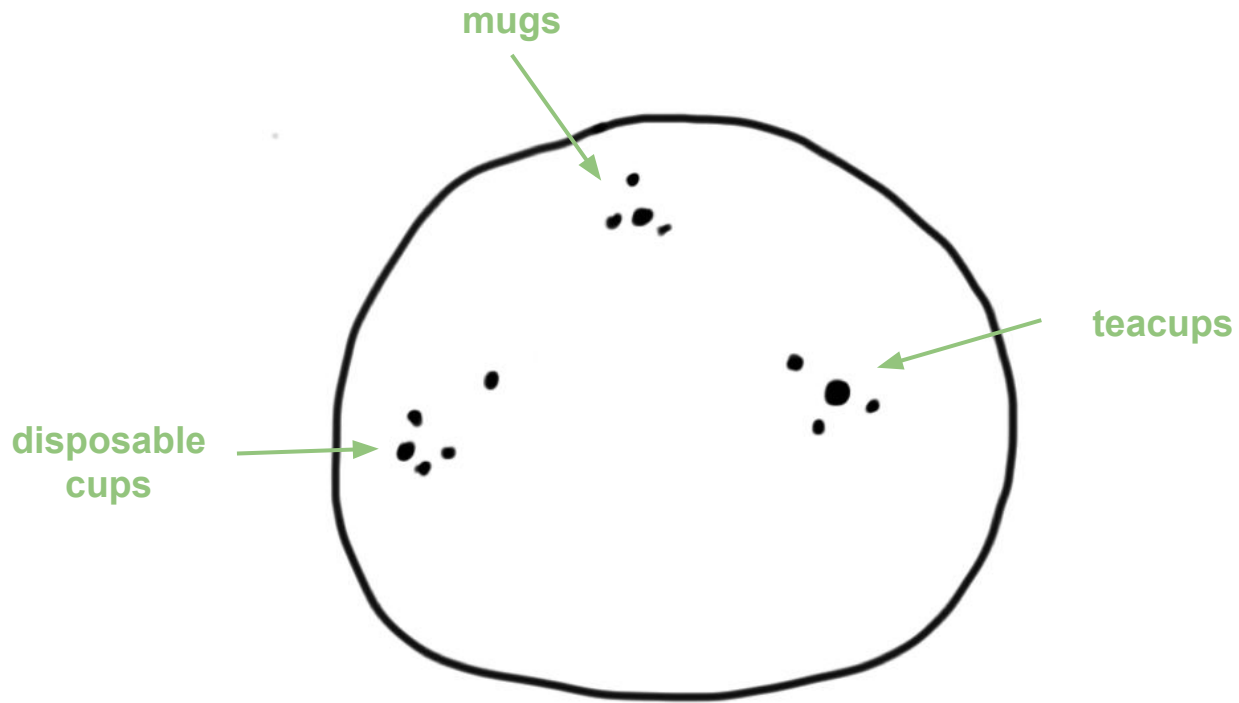
all possible solutions go **inside** the design space



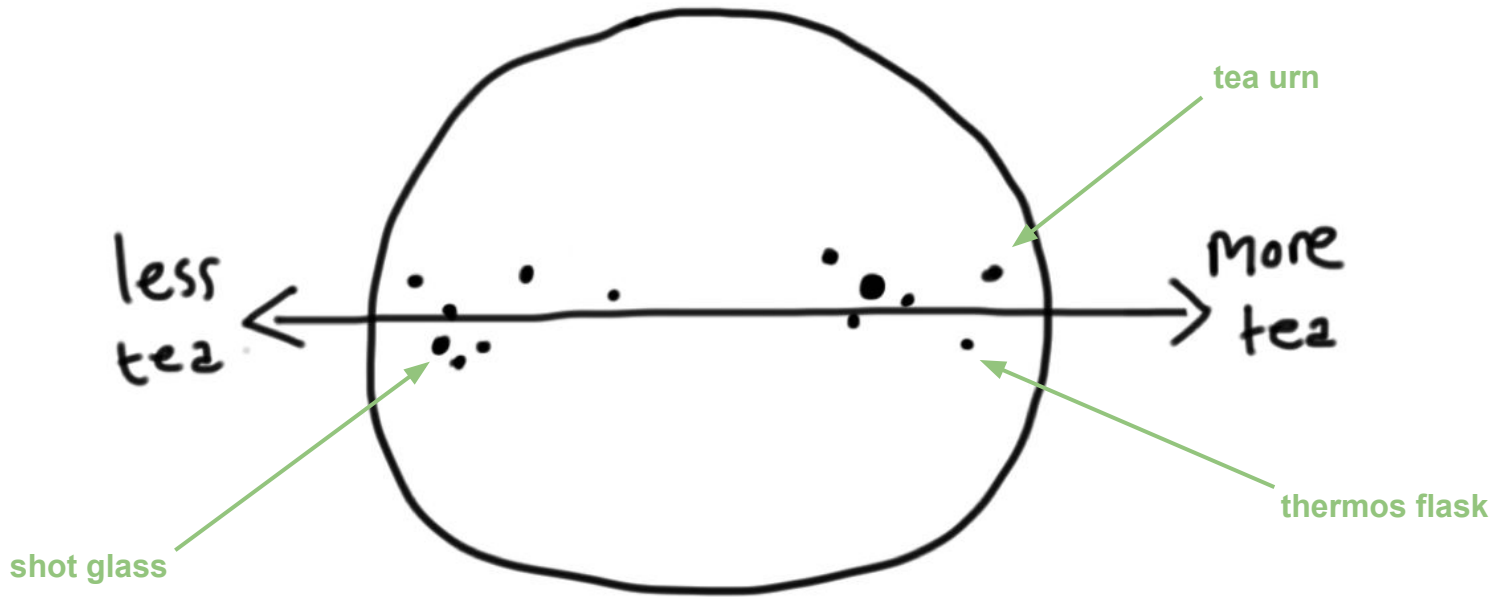
and non-solutions go **outside** of the design space



a starting point is to **discover, collect and explore** existing solutions (lists / pinboards / lit. survey)

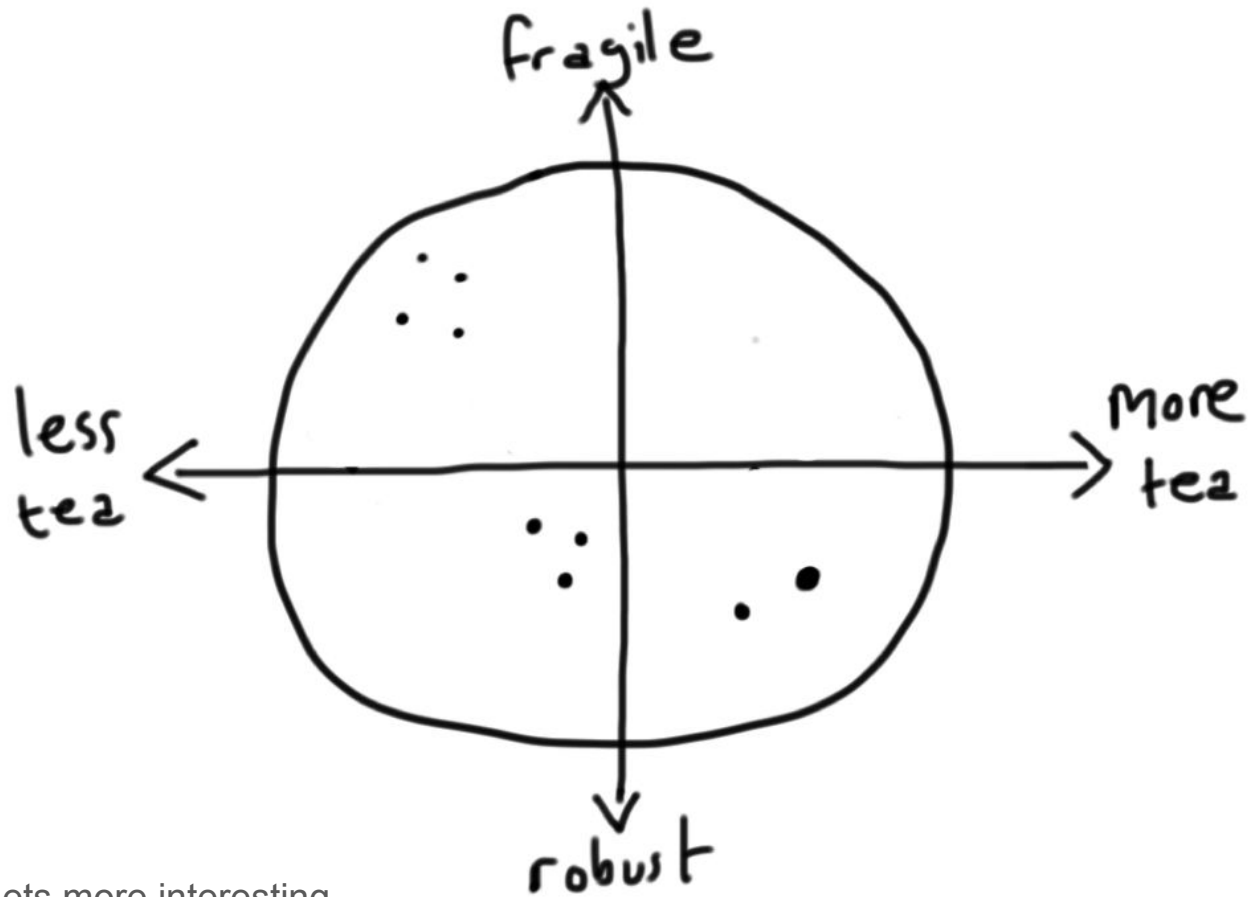


**thematically grouping** the existing solutions makes things easier to discuss

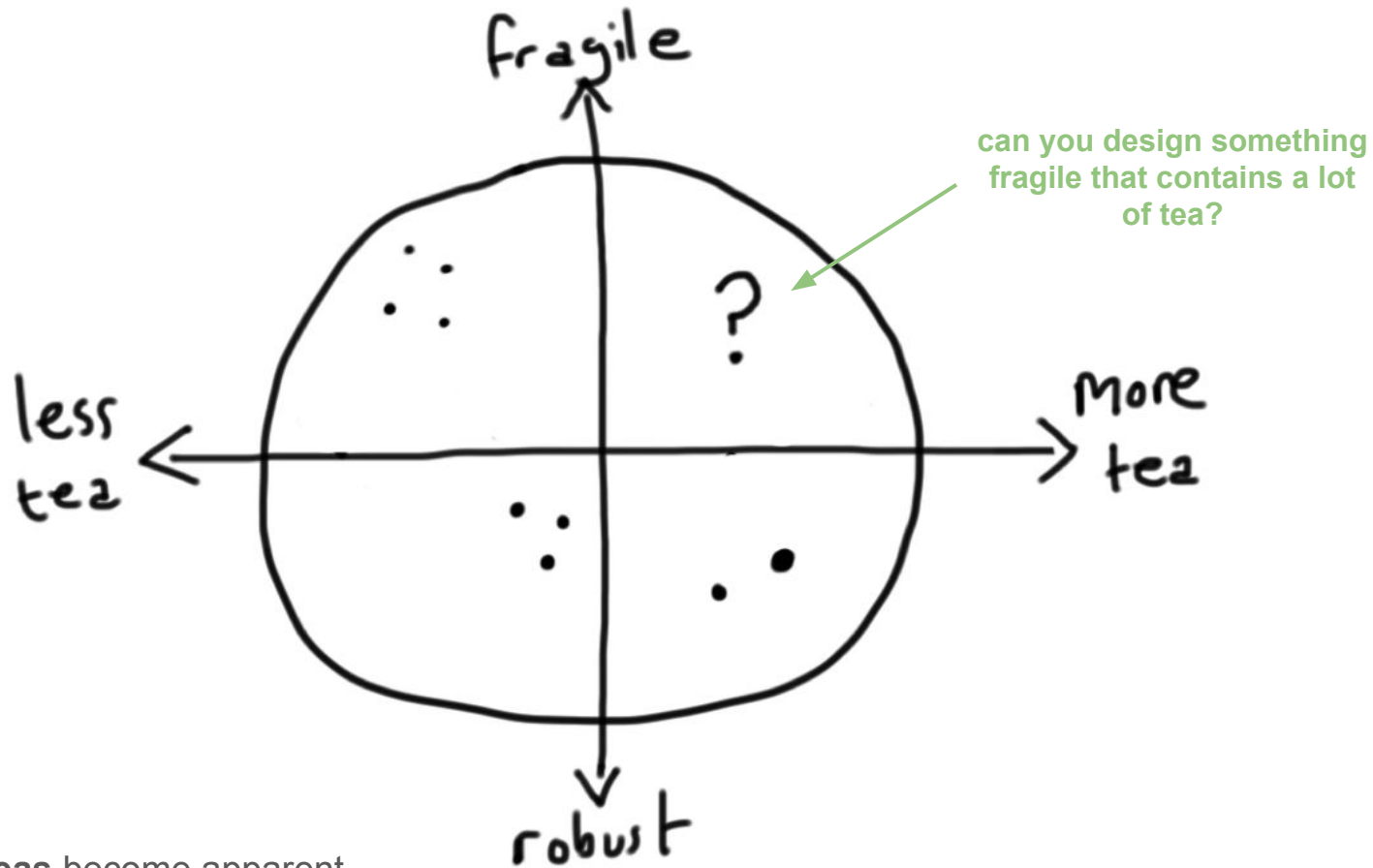


another way to explore design space is by introducing **qualities**, looking at one aspect of the design

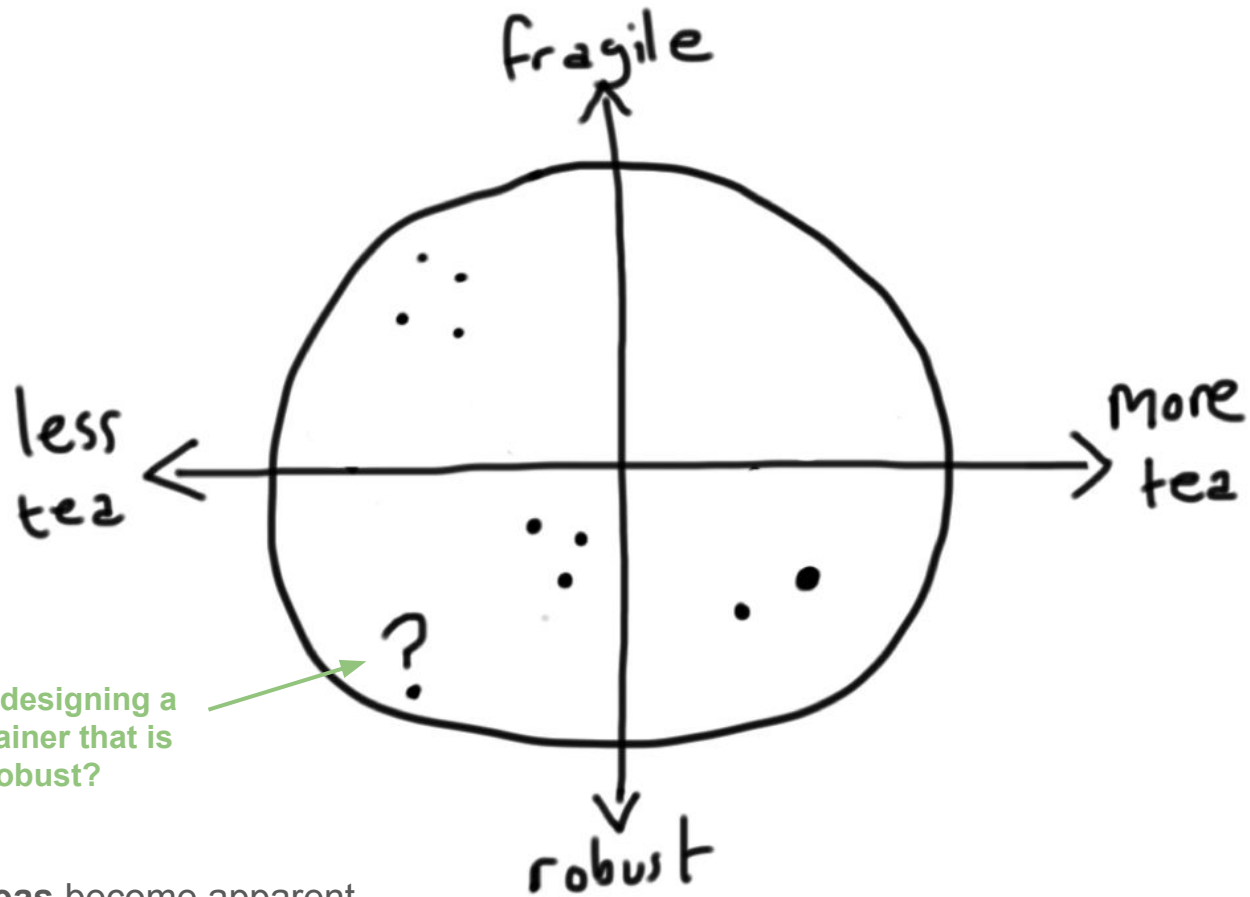




two qualities gets more interesting



unexplored areas become apparent



how about designing a  
small container that is  
very robust?

unexplored areas become apparent

fragile ←————→ robust

less tea ←————→ more tea

playful ←————→ functional

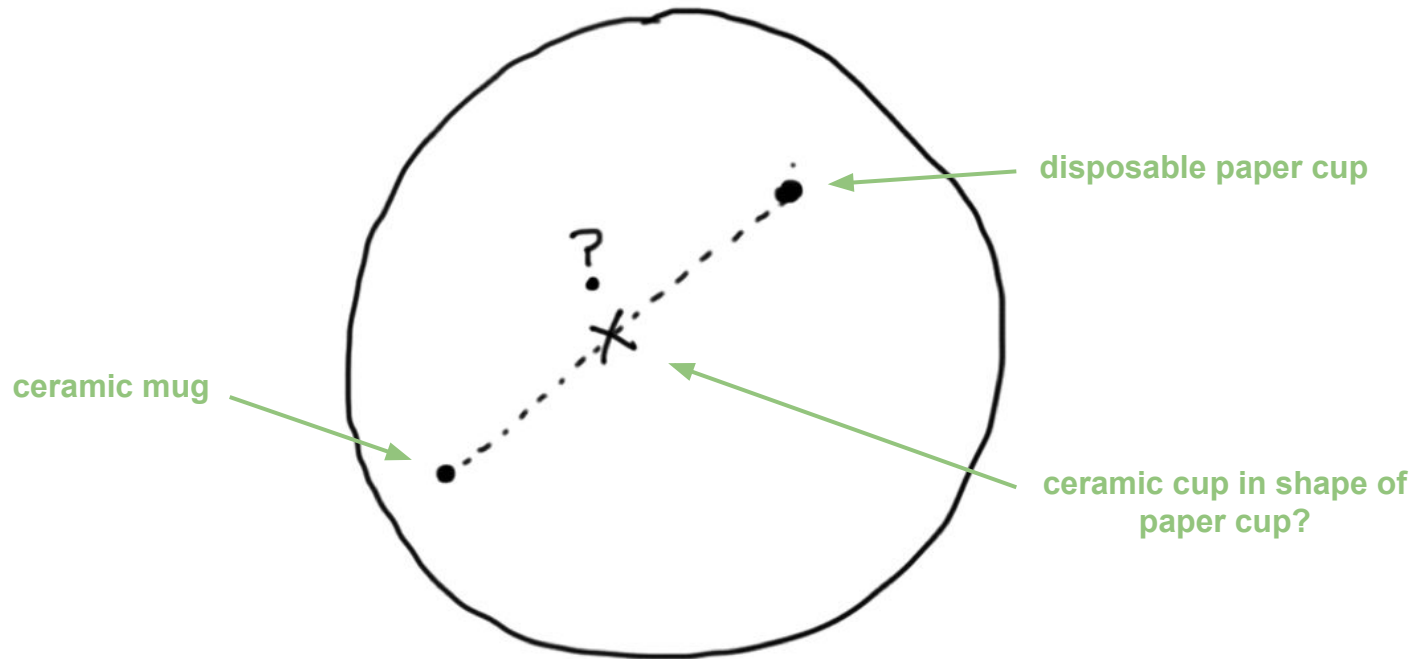
inside ←————→ outside

hot ←————→ cold

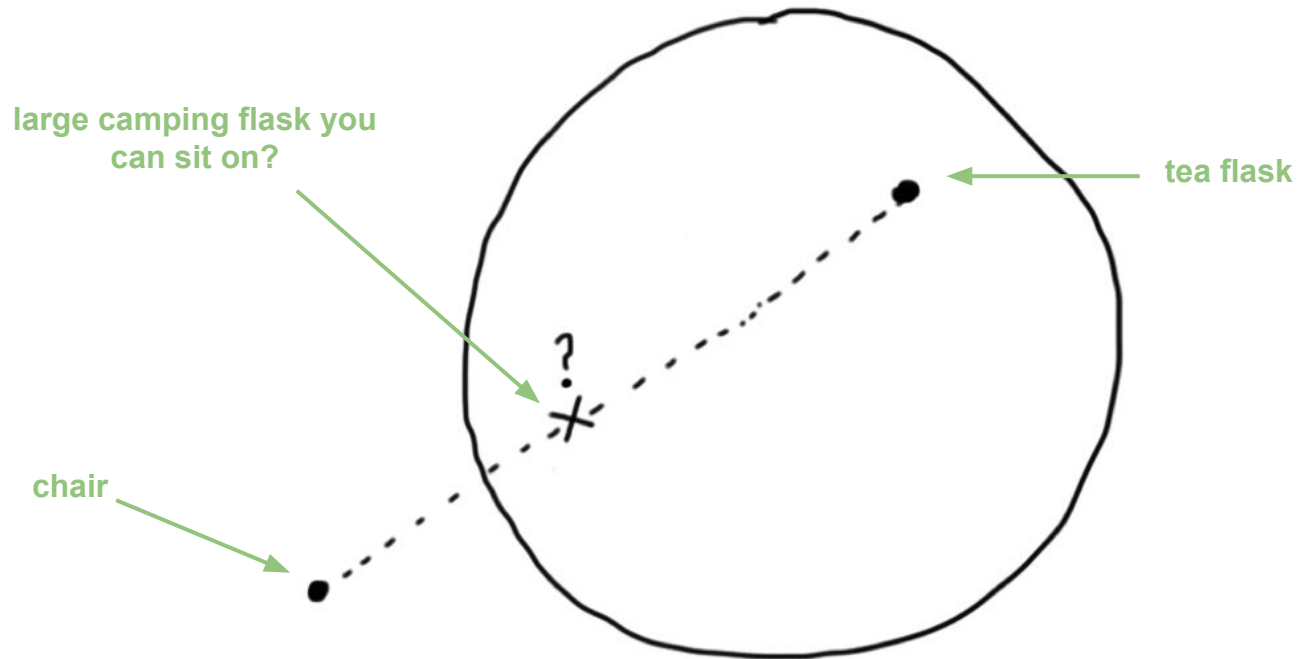
building a **vocabulary** around your design space

# design space techniques

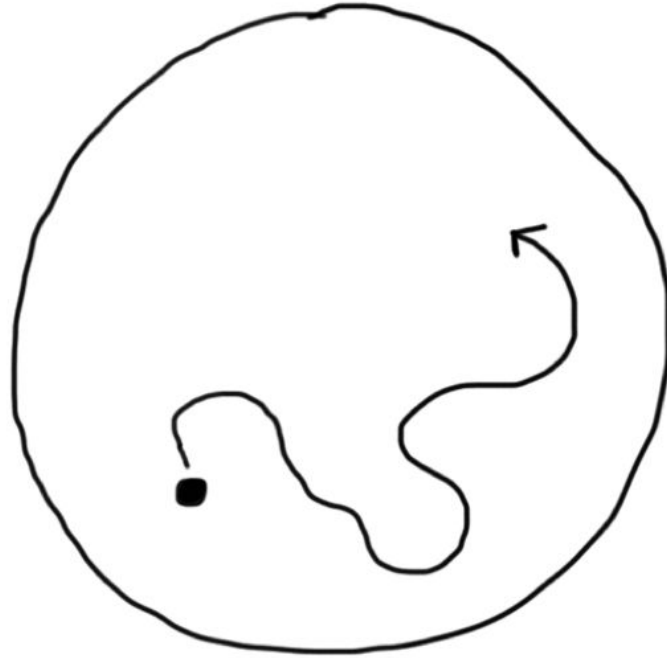
.... but how do I use this to generate new ideas?



**juxtaposition** - take two unrelated ideas and see what is in between, slide closer to one, then the other

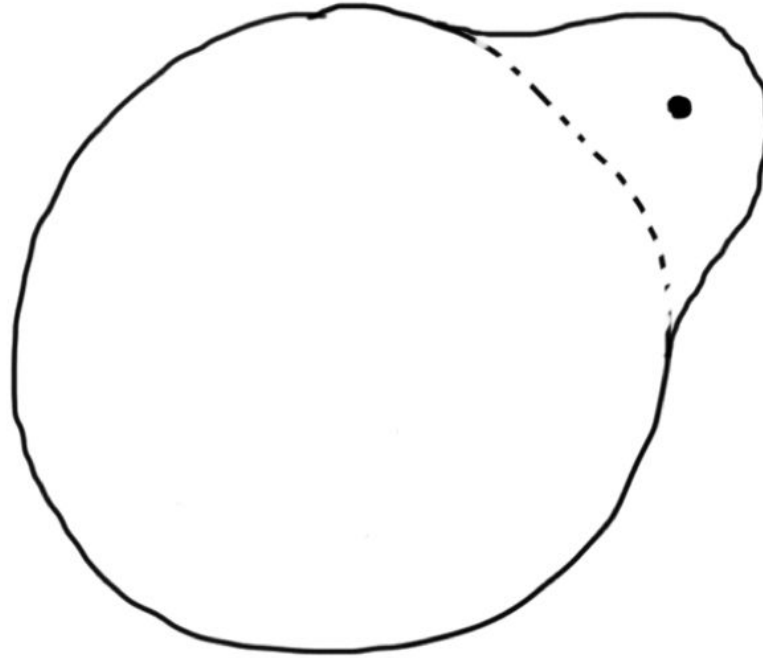


you can even **juxtapose** with something that is not even a solution



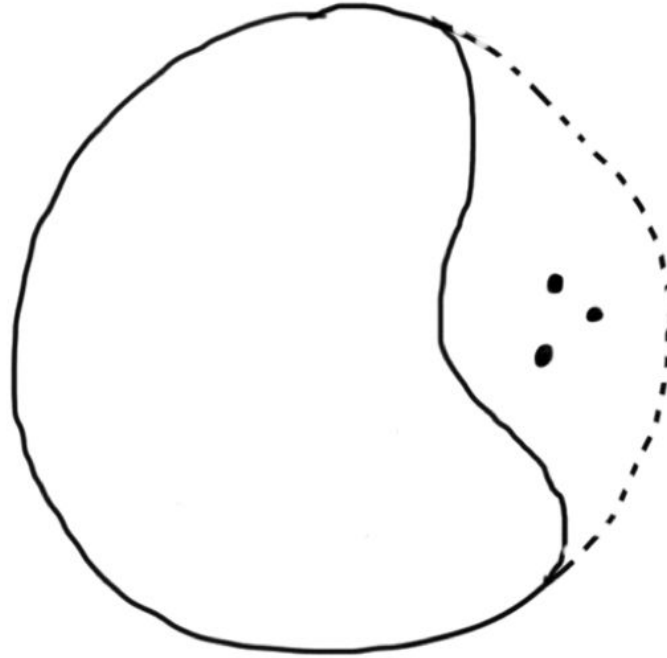
**iterate** on only one idea - stick with it and see where you end up





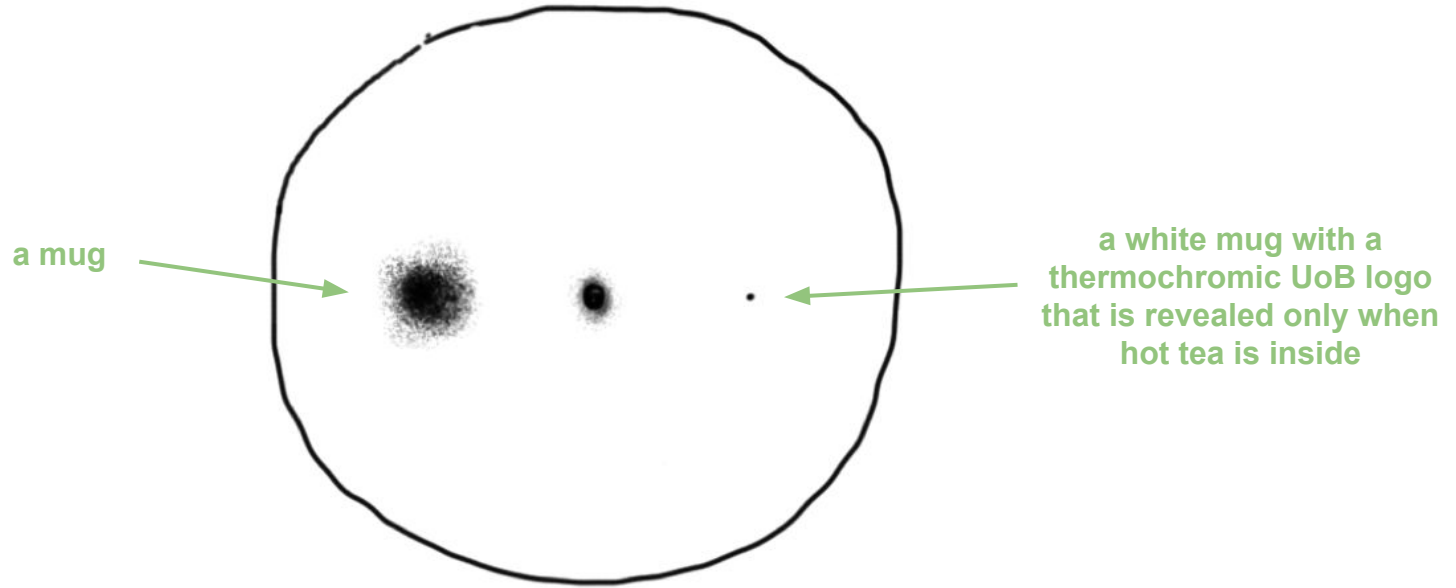
"design a whole range of  
tableware for a cafe"

remember - you can **redefine** your question or brief

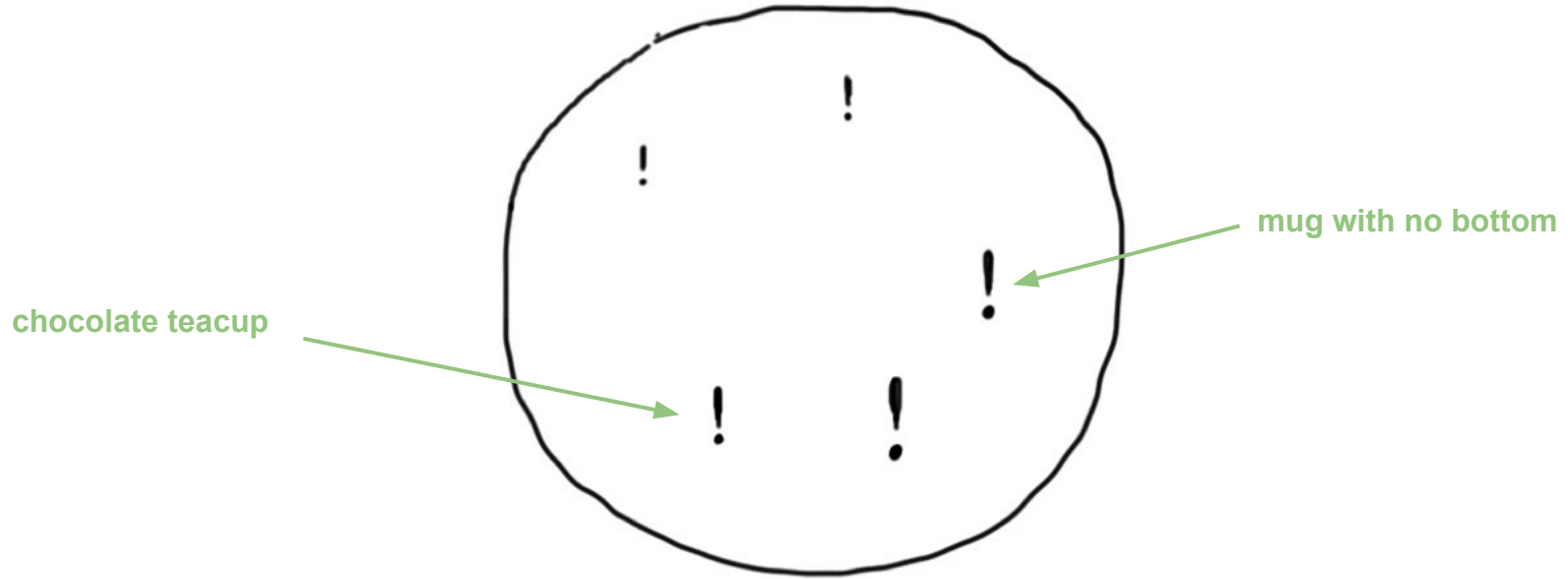


"design a way to drink  
ice-tea in hot weather"

I would recommend redefining your brief to make it **more specific**

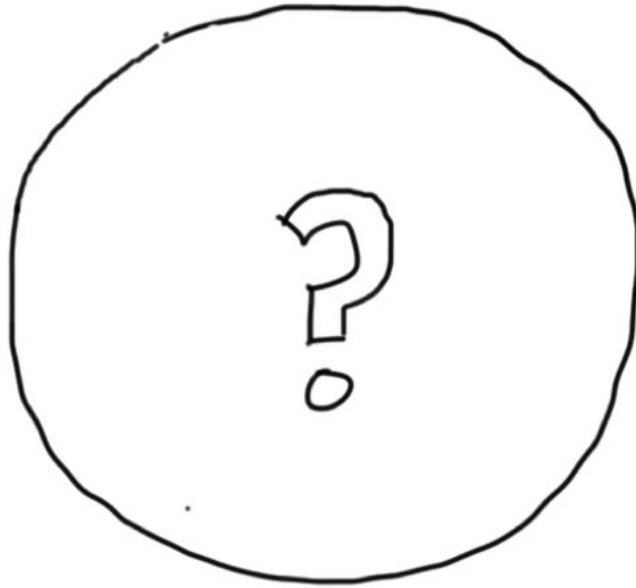


is your idea **ambiguous** or **very specific**? ...pay attention and don't get stuck at one level



map out **all the bad ideas** your team can think of, this way you know what to avoid!

humour is also a great aid to creative thinking, irreverent and humorous suggestions are essential

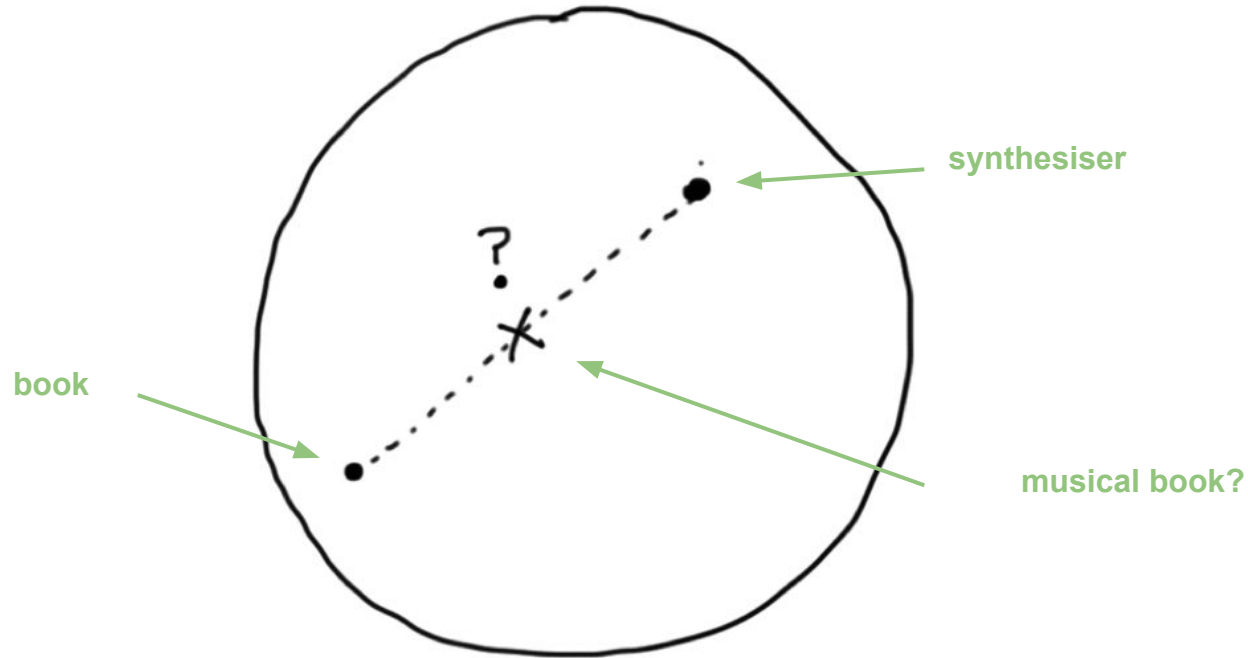


come up with your **own ways to navigate** design space!

the main thing to do is **think about how you are thinking ... be reflective about process**

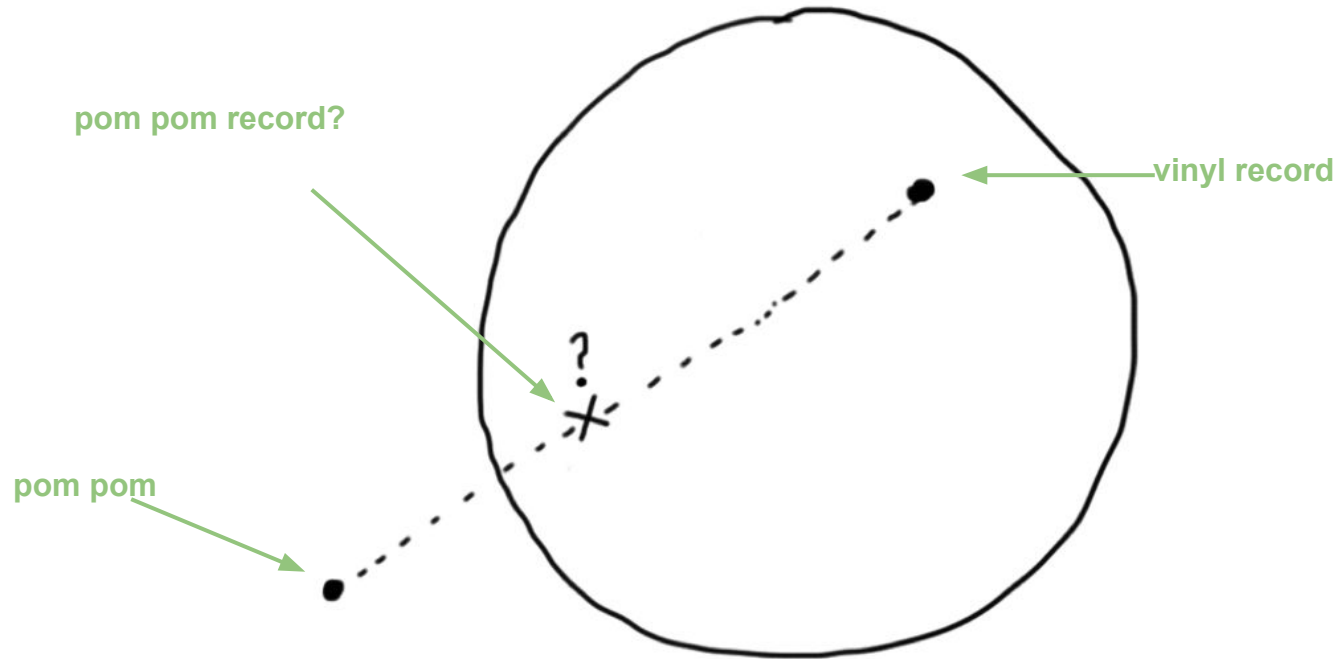
**time to generate new ideas!**

5  
mins



**take two post-its and create an idea in-between**

5  
mins



merge a random object with a type of media



10  
mins

fragile ←————→ robust

less tea ←————→ more tea

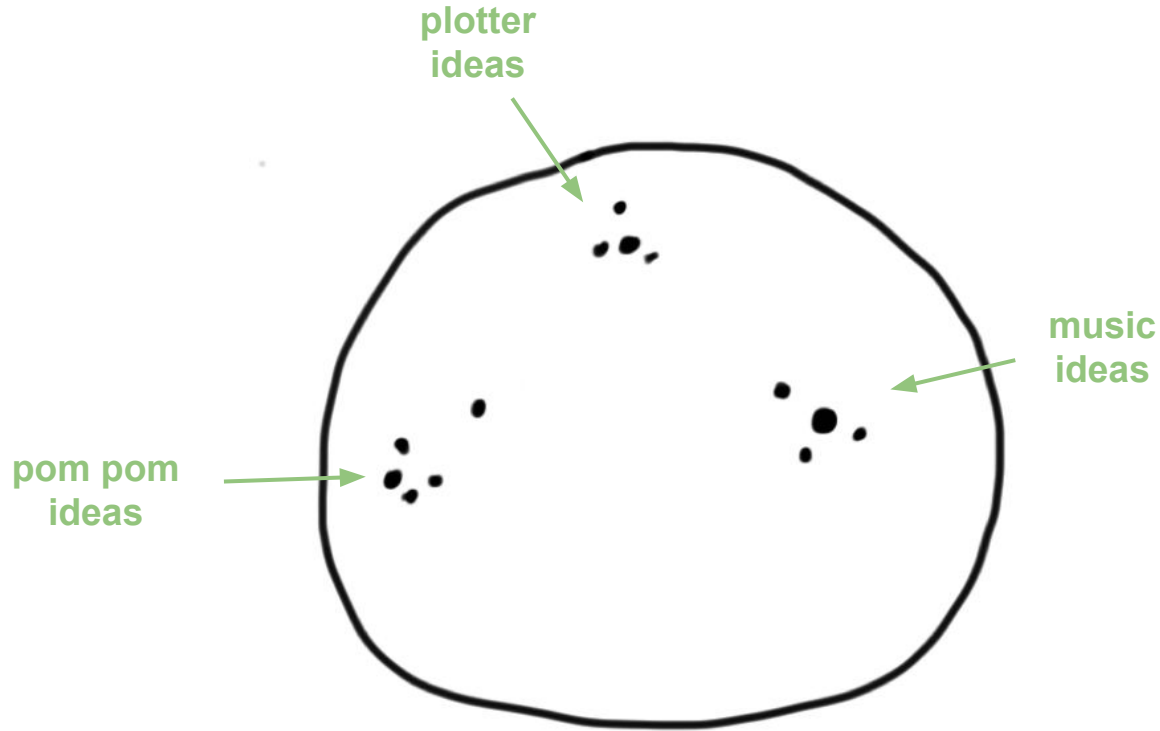
playful ←————→ functional

inside ←————→ outside

hot ←————→ cold

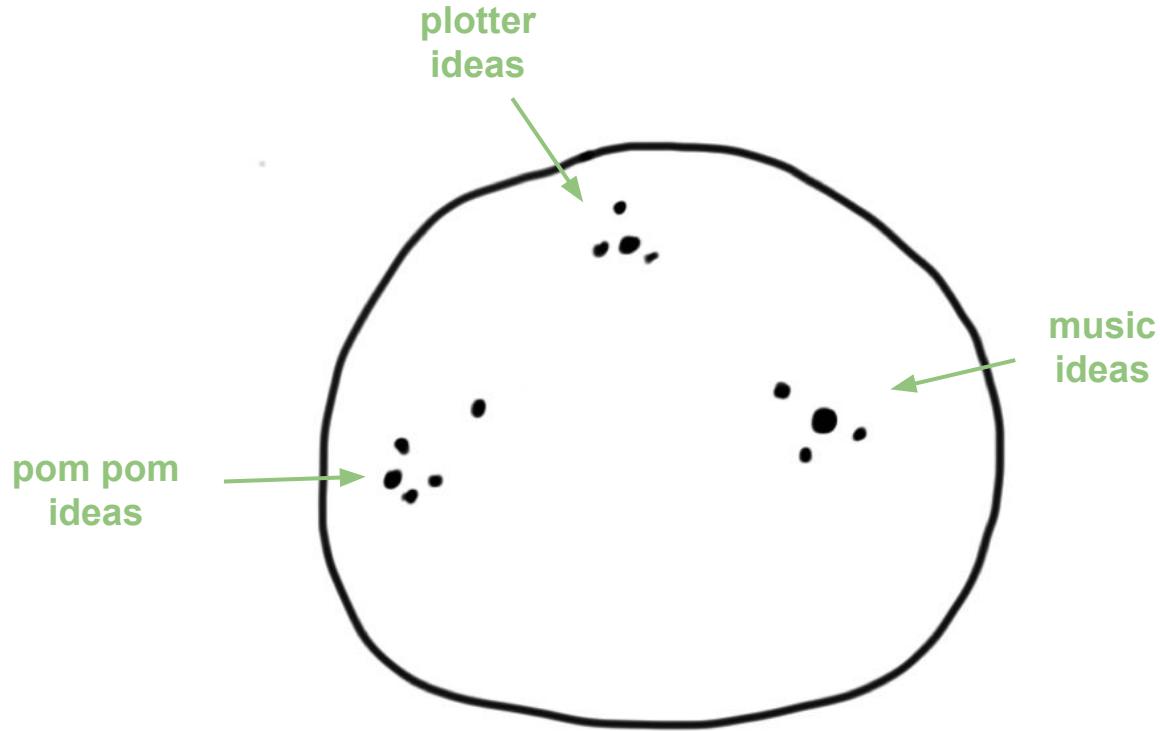
**build a vocabulary (write on board)**

10  
mins

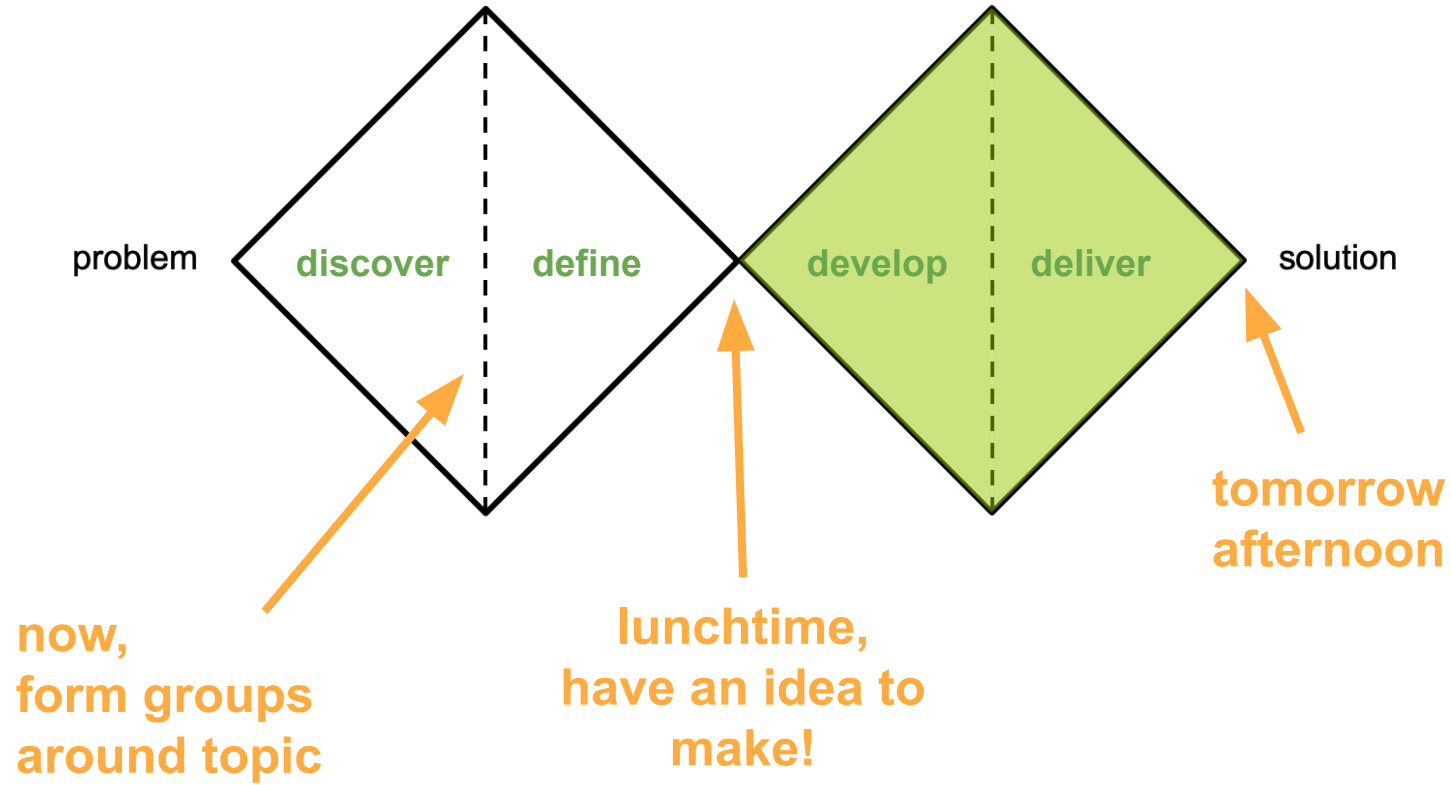


**group post-it notes**

10  
mins



**now form teams around the groups**



# continue to refine idea in your new group

until  
lunch

- **group** - try organising your ideas thematically
- **juxtapose** - take two (or three!) post it notes, what lies between?
- **iterate** - concentrate on one post it note, see how far you can go?
- **redefine** - focus on the rewriting the brief
- **bad ideas** - try out some terrible ideas
- **vocabulary** - build up a selection of unique parameters
- **gaps** - look for gaps in your design space

**stuck?** - try introducing some new post-its with a person, actions, emotions or moods to mix things up and bring a new perspective.

