

DESIGN THINKING

PART TWO

The five phases of the design process:

1

DISCOVERY



2

INTERPRETATION



3

IDEATION



4

EXPERIMENTATION



5

EVOLUTION



**I have a
challenge.**

*How do I
approach it?*

**I learned
something.**

*How do I
interpret it?*

**I see an
opportunity.**

*What do
I create?*

**I have an
idea.**

*How do I
build it?*

**I tried
something.**

*How do I
evolve it?*

STEP 1: DESIGN CHALLENGE DISCOVERY



**I have a
challenge.**

*How do I
approach it?*

Understand the problem
(design challenge).

In this phase you research
about the problem and you
ask other people for help.

EXERCISE: FIND PROBLEMS

Let's share some ideas with the class.

DREAM

Think about something you wish:

"I really wish my school had..."

"I would be great if in the subway there was..."

"I would love if I could use..."

COMPLAINT

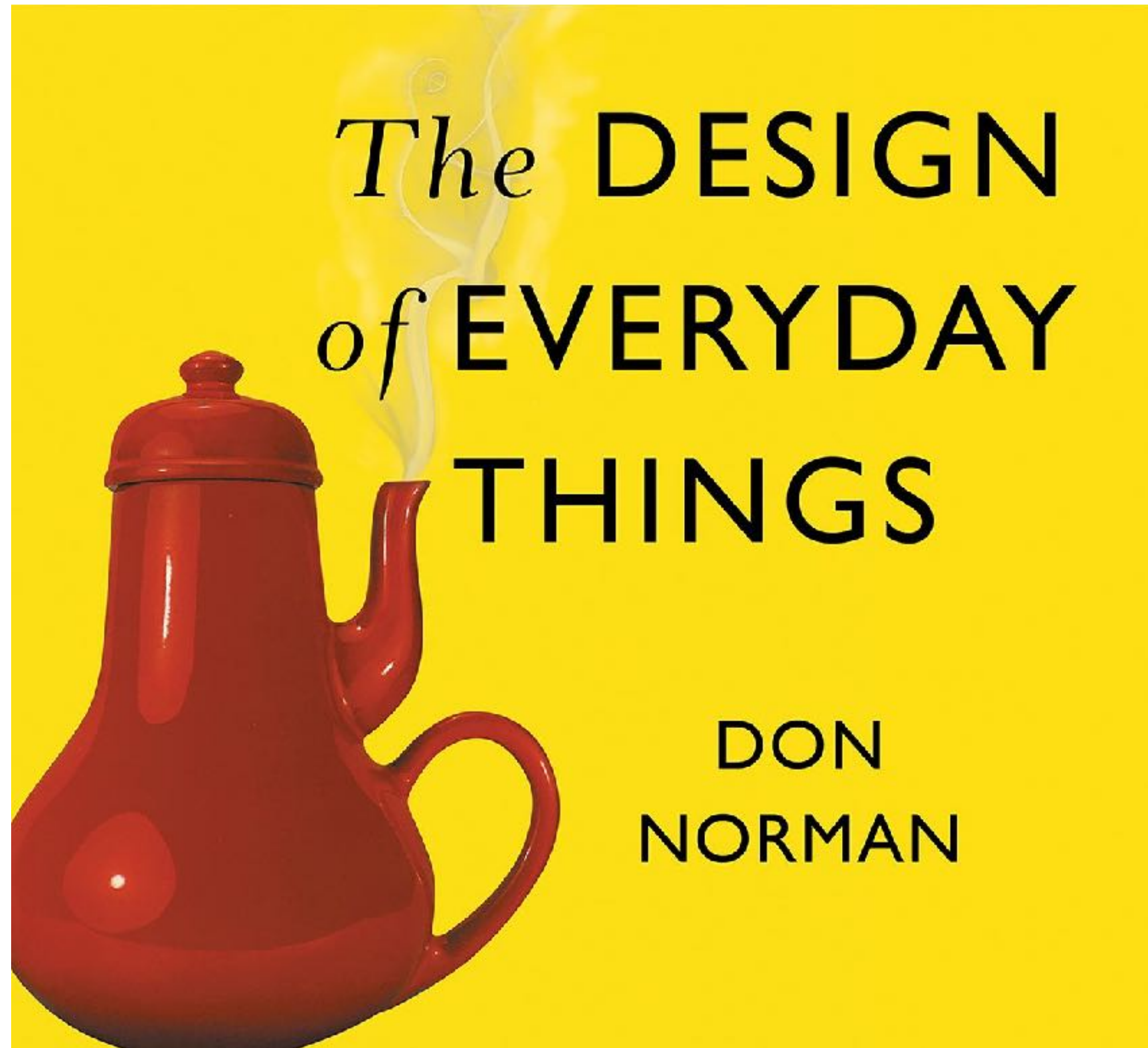
It could also be something you dislike:

"It annoys me that we're not..."

"I hate when ...this thing... happens"

**Let's take a look at the dreams
and complaints you researched.**

HUMAN CENTERED DESIGN



"There aren't just problems, but people with problems"

Human Centered Design was defined by Don Norman in his famous book "The design of everyday things".

His idea is that good design shouldn't only be focused on tangible and physiologic instances of the users (ergonomics), but it should also incorporate their emotional and psychological preferences as well.

HUMAN CENTERED DESIGN



This design
is made *for*
the TV

This design
is made *for*
the people
watching TV



DESIGN THINKING IS HUMAN CENTERED

1

DISCOVERY



**I have a
challenge.**

*How do I
approach it?*

HUMAN CENTERED DESIGN

Design thinking is a discipline that revolves around people and their needs to find solutions.

"There aren't just problems, but people with problems"

A designer doesn't only document what people do in order to find a solution, he needs participants' involvement in the process of researching and producing solutions.

DESIGN THINKING IS HUMAN CENTERED

1

DISCOVERY



**I have a
challenge.**

*How do I
approach it?*

How to get help from people?

- **interview** the users
- join in their daily life activity
- observe where they live and what they do
- experience their problems

Establish a human connection based on *EMPATHY* (同理心)

What is **empathy** and why it is so important

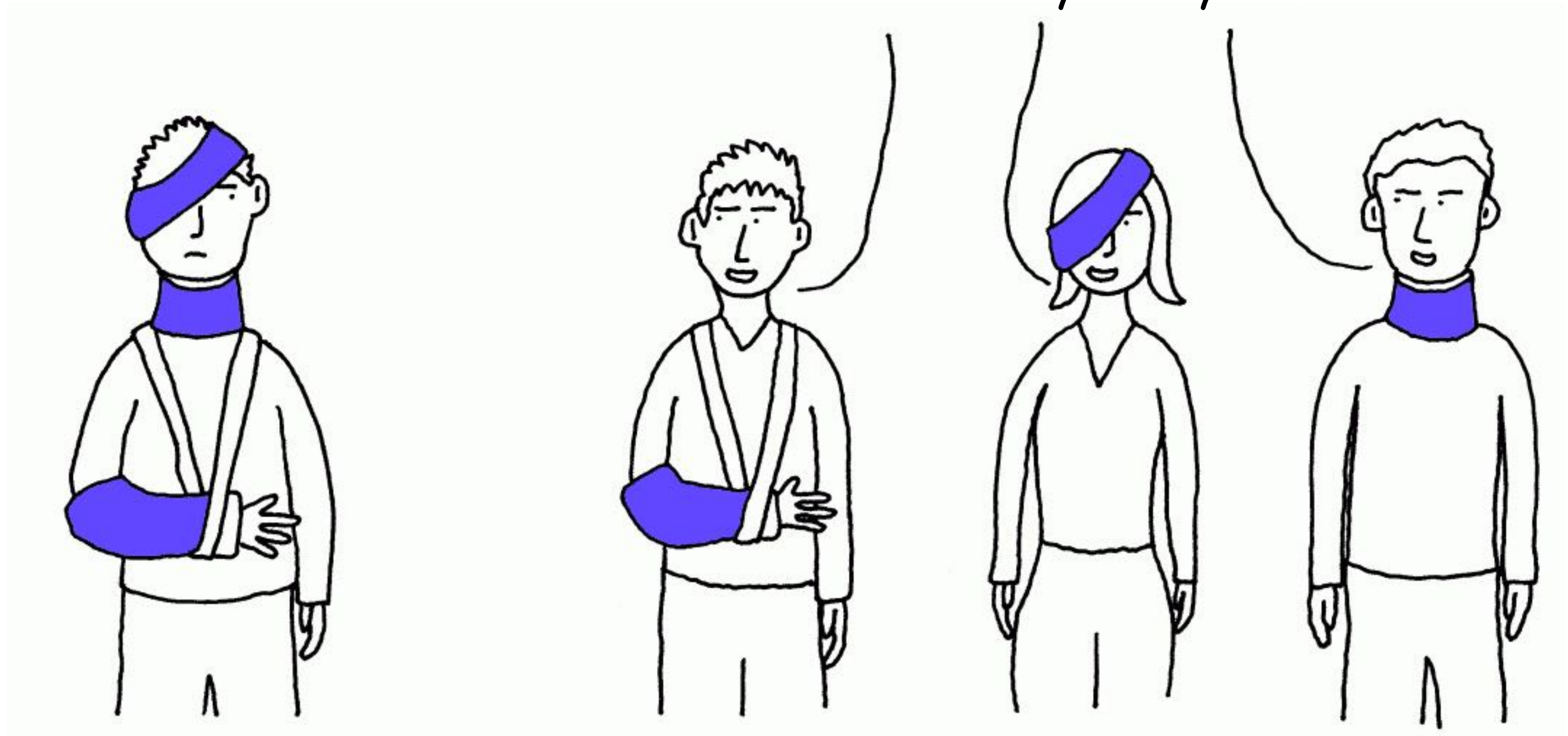


Sympathy: "I feel sorry for your problems".



Empathy: "I have the same problem as you".

We know exactly how you feel!



HOW TO MAKE AN INTERVIEW?

Have you ever been to the doctor?

HOW TO MAKE AN INTERVIEW?

Have you ever been to the doctor?

**Doctor, it hurts here
when I do this and
then I feel like this and
that, please doctor
help me it's very
painful, OMG doctor
am I gonna die????!!!**



HOW TO MAKE AN INTERVIEW?

Have you ever been to the doctor?



Yes, yes, keep talking, I'm listening, I can hear you...



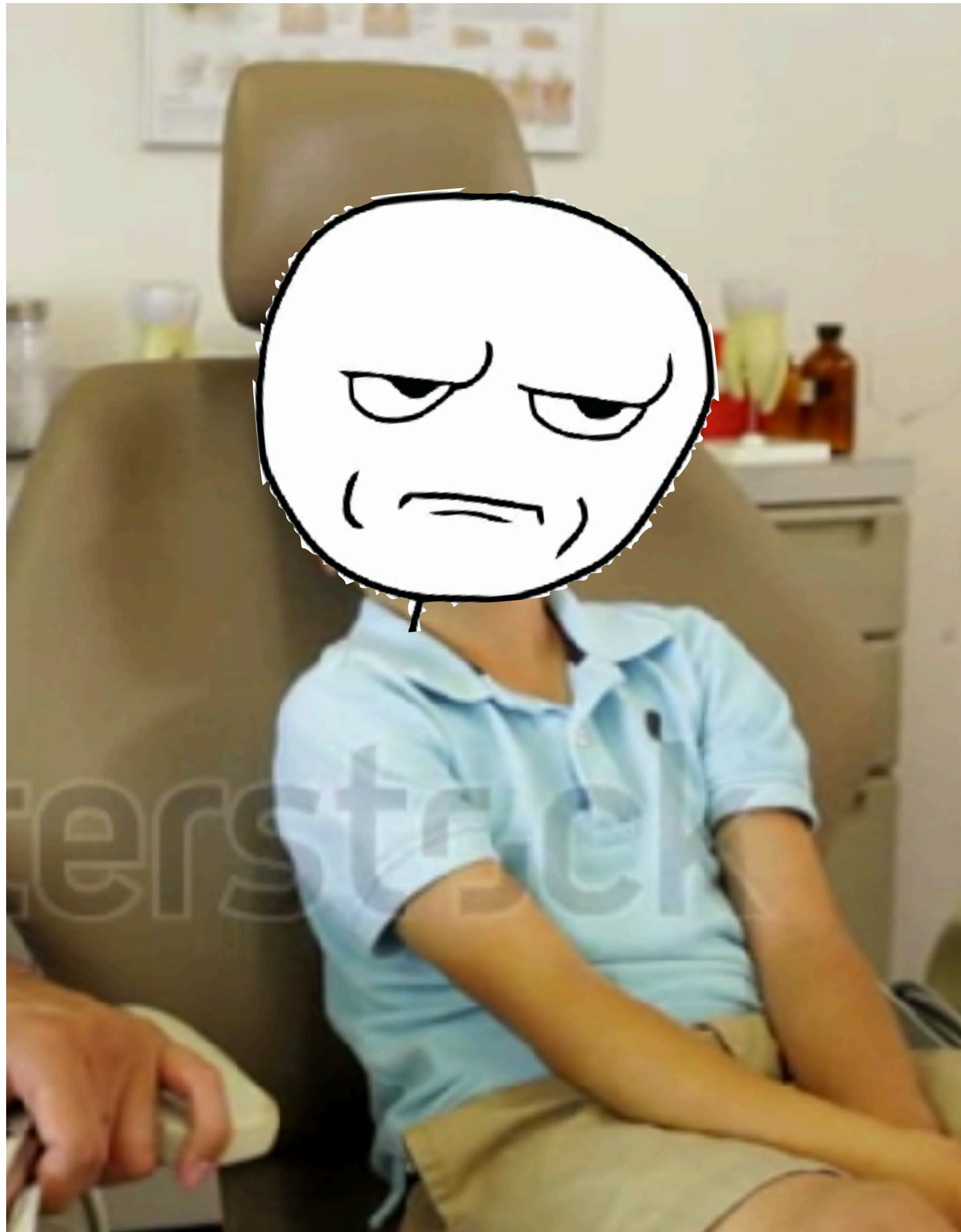
HOW TO MAKE AN INTERVIEW?

Have you ever been to the doctor?



HOW TO MAKE AN INTERVIEW?

Have you ever been to the doctor?



HOW TO MAKE A *DESIGNER* INTERVIEW?

HOW TO MAKE A *DESIGNER* INTERVIEW?

USE EMPATHY

同理心

WHICH QUESTIONS COULD YOU ASK TO BETTER UNDERSTAND THE TOPIC?

- We want to put ourselves in other people's shoes to see problems from a different perspective.
- We know our point of view because we have been going through the same situation, but we want to know: what happened to other people?
- Which problems did they have to face?
- **How did they solve their problems?**

WHICH QUESTIONS COULD YOU ASK TO BETTER UNDERSTAND THE TOPIC?

You will prepare the questions of an interview that you will ask to other people in the campus.

Start by asking 3 questions, and try to **get a story as an answer**. A story about a problem and how they solved it.

If you get stuck and the interviewee doesn't talk too much, you can ask "WHY?".

EXAMPLE: GETTING A STORY AS AN ANSWER

Interview results

Q: *What annoys you the most about wearing a facemask?*

A: I don't like to add more waste into the world so I want to reuse my masks.

Q: *Can you tell me more about this feeling?*

A: I feel bad using a piece of plastic for such a short time and then trashing it. I know we shouldn't reuse the masks, but I read that the virus cannot survive for more than 3 days, so after using a mask, I hang it on clothes hangers and I will use it again after 3 days.



WHAT KIND OF INTERVIEW IS THIS?

For this interview we don't use a scientific approach, looking for *exact* and *measurable* data (age, gender, etc).

As designers, we will use the *empathy* approach and try to make people share their feelings and ideas. Our objective is to find stories on how they managed and tried to solve their problems.

WRITE DOWN 3 QUESTIONS – 5 MINUTES

Things *NOT* to say:

Yes/No questions

They kill the conversation.

"I think that..."

Don't suggest answer to your own question.

"What!? That's stupid!"

Don't judge.

Things to say:

Tell me about the last time...

Can you tell me a story about...

*What do you **think** about...*

*What do you **feel** about...*

Why did you do/say/think that?

Can you say more about that?

Why?

Why?

Why?

SHARE THE QUESTIONS

Share one questions you prepared
with the class

HOMEWORK:

PREPARE QUESTIONS, MAKE AN INTERVIEW, RECORD ANSWERS

Your assignment is to prepare an interview, a list of questions that you can ask to understand better how other people live their life during the epidemic. Use the "totem" to "break the ice" with the interviewee.

Remember: try to get a story about a problem and how they solved it.

If you get stuck and the interviewee doesn't talk too much, you can ask "WHY?".

To further investigate the topic, you may read chapter six (page 217-220) in *Norman, Donald A. The Design of Everyday Things. New York: Doubleday, 1990*