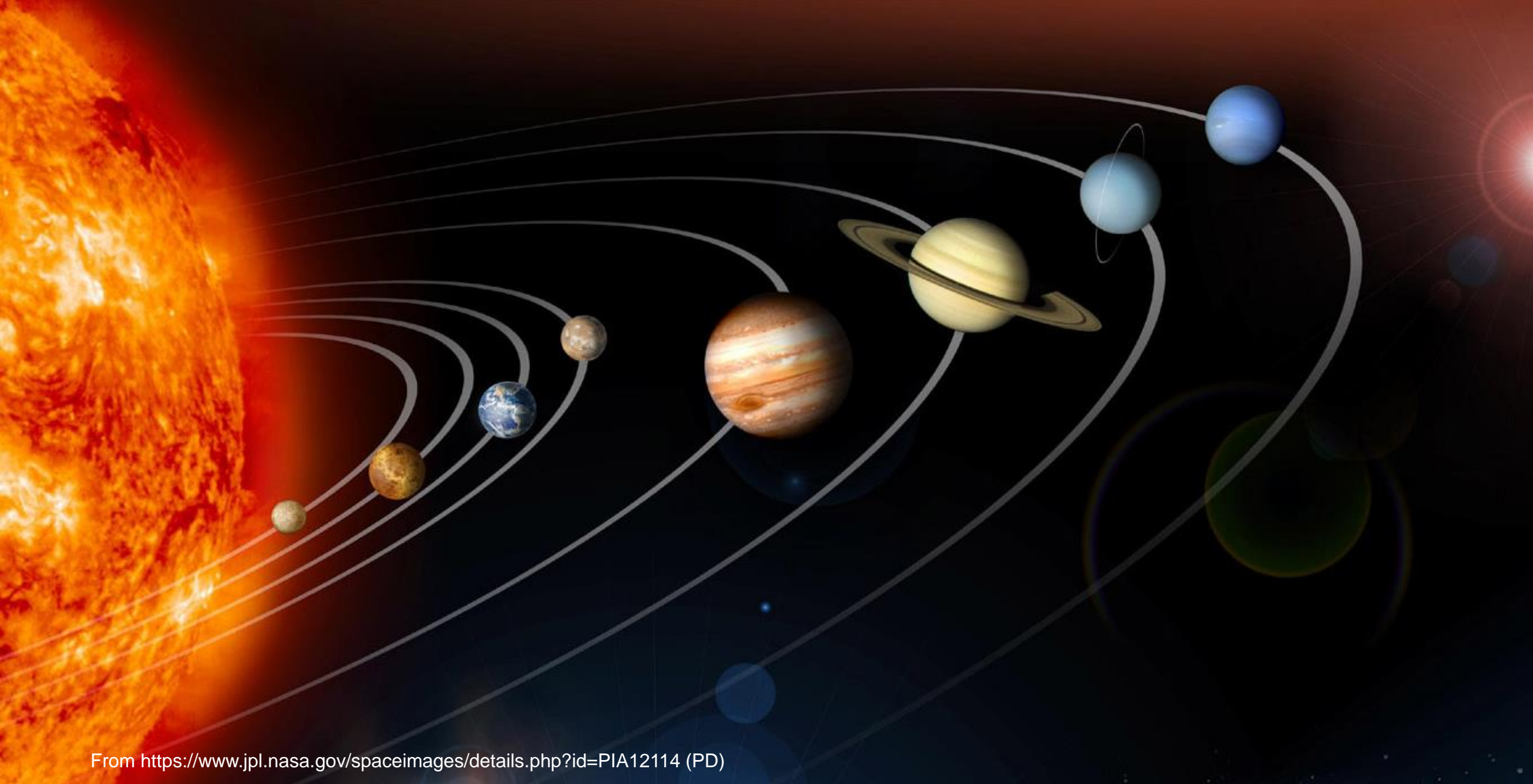


Introduction to Models

Learning Goals

- Understand what models are and why they are useful
- Now about their limitations
- Have a rough overview of models in HCI





From <https://www.jpl.nasa.gov/spaceimages/details.php?id=PIA12114> (PD)

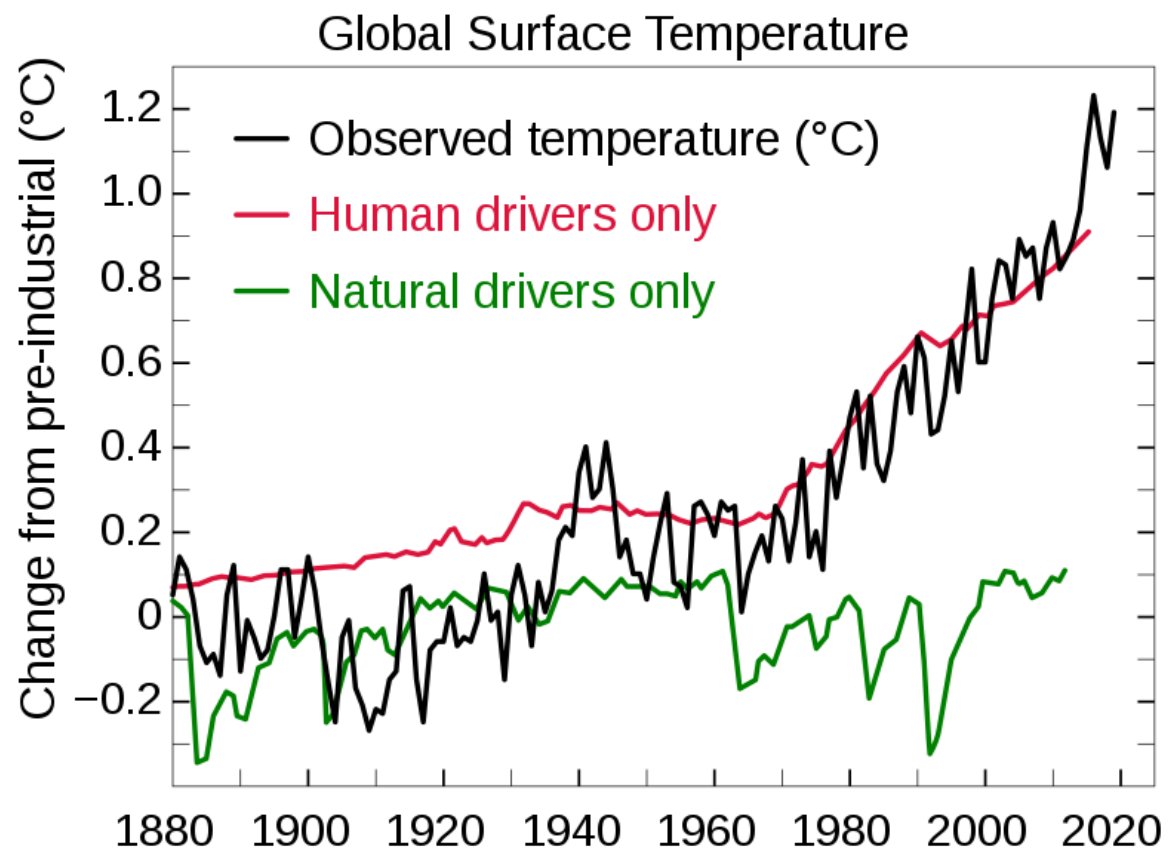


Image by Efbrazil from https://en.wikipedia.org/wiki/File:Global_Temperature_And_Forces.svg (CC BY-SA 4.0)

Models

- Are representations of phenomena that help us to understand how something works or how it will work.
- Models are never perfects. There will always be one that is better for specific questions.
- A model is only useful for specific phenomena but not is not useful for most phenomena.

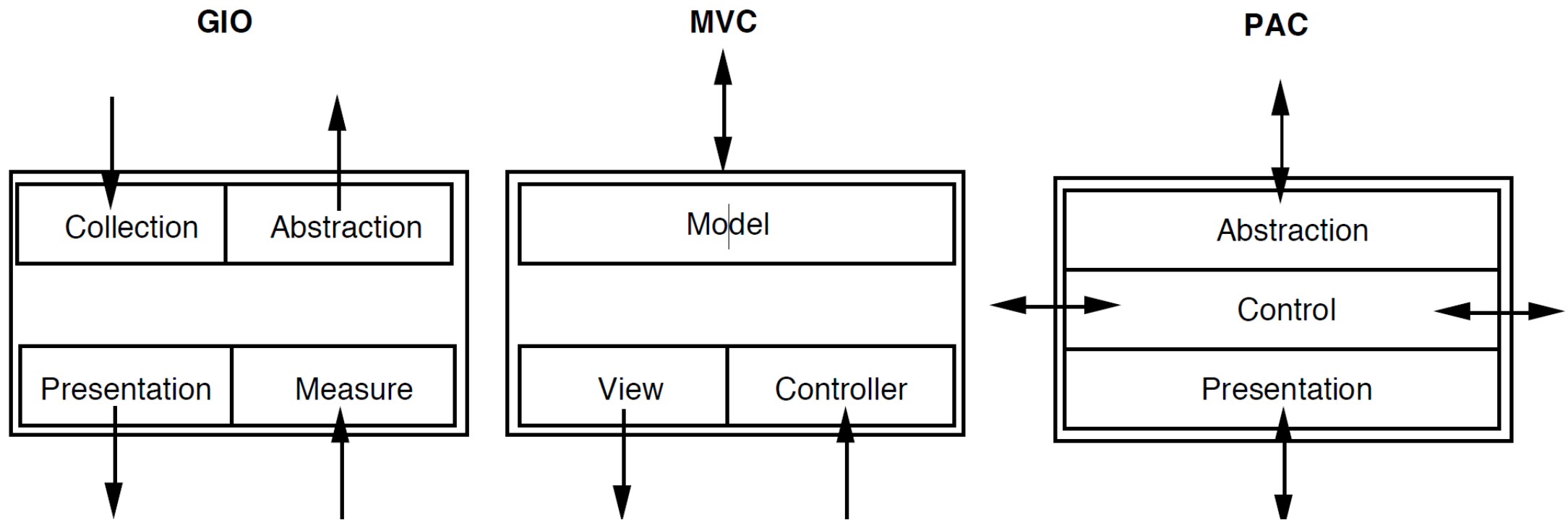
Models in Human-Computer Interaction

Can you think about phenomena that we could model in HCI?



- Prototypes are representations of systems and help us to understand how they will work.
- Perfectly valid models and used in HCI
- Covered in a dedicated block

From Le, H. V., Mayer, S., Bader, P., & Henze, N. (2017). A smartphone prototype for touch interaction on the whole device surface. MobileHCI.



- Conceptual software architecture models are representations of our systems
- Similar to prototypes they help us to build better systems
- Yet another topic for another time

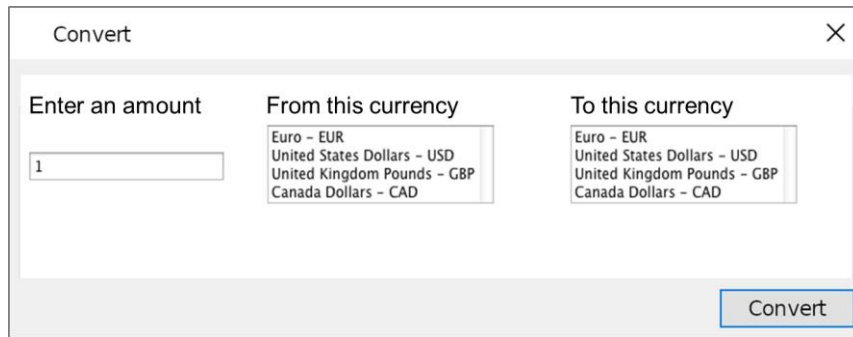
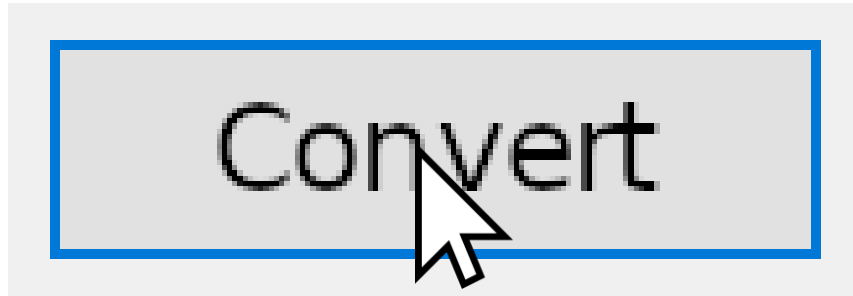
From Coutaz, J., Nigay, L., & Salber, D. (1993). Conceptual software architecture models for interactive system. ESPRIT BRA, 7040.



- Mental models are models users form about our systems
- While we want to influence them, we cannot develop them
- Also covered in another block

Image by Andrea Piacquadio from <https://www.pexels.com/photo/photo-of-a-woman-thinking-941555/>

task complexity



Bottom image by Andrea Piacquadio from <https://www.pexels.com/photo/photo-of-woman-using-her-laptop-935756/>

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