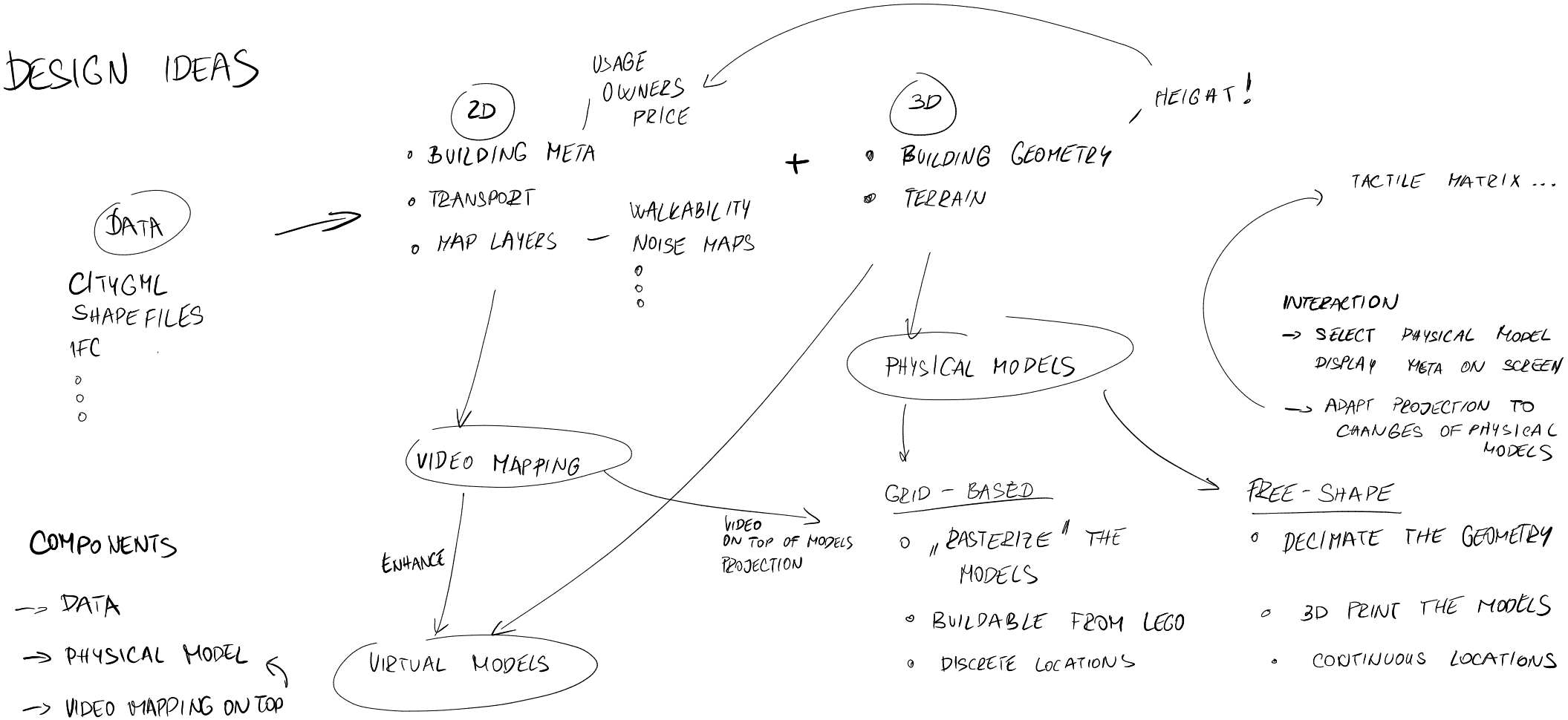
# DESIGN IDEAS




## COMPONENTS

- → DATA
- → PHYSICAL MODEL
- → VIDEO MAPPING ON TOP
- → SCREEN / PROJECTOR
- → CAMERA ?

- DISPLAY ADITIONAL DATA
- „VIRTUAL REALITY" ← THE CONTENT IS NOT LIMITED BY PHYSICAL REALITY
- ADD OR REMOVE ANY MODELS DYNAMICALY
- EXTEND 2D VISUALIZATION INTO 3D EASILY → GIVES CONTROL OVER THE USER ATTENTION?
- ACCESIBLE FROM ANYWHERE

## ① DATA

- 3D GEOMETRY
  - TERRAIN
  - OBJECT
    - BUILDING
    - FEATURE (STATUE, FOUNTAIN...)
- POINTS
- PATHS
- AREAS

→ LAYERS

→ THE SW I MAKE

## ② APPEARANCE MODIFIED BY STYLES

- 3D MODEL AS BASE
- LAYERS ON TOP → GENERATE OUTPUT FOR PROJECTOR

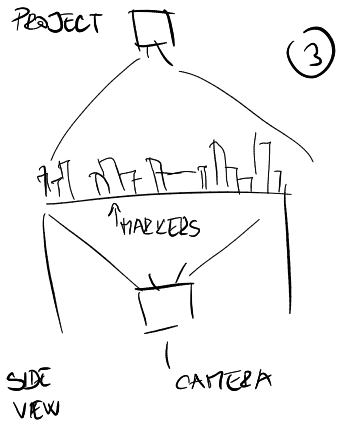
↓

GENERATE WIDE SCREEN PROJECTION

↓

## ③ RASTERIZE / VOXELIZE DATA - ESTABLISH GRID

- PRESERVE SPATIAL RELATIONSHIPS ← CAN BE CUSTOMIZABLE (EG. OMMIT STREETS NARROWER THAN ...)
- PRODUCE MODELS FOR PRINT / ASSEMBLY ← NUMBER OF COMPONENTS / MATERIAL + MODELS
- TAKE INTO ACCOUNT MODEL REGISTRATION (GENERATE MARKS ON THE BOTTOM)
  (GIVE NEIGHBORS DIFFERENT MARKS)





IDEAS

- STYLES:

BUILDING / LAYER METDATA → □ → CUSTOMIZED VISUALISATION

- SIMULATIONS:

METADATA + MODEL POS. → □ → NEW LAYER?

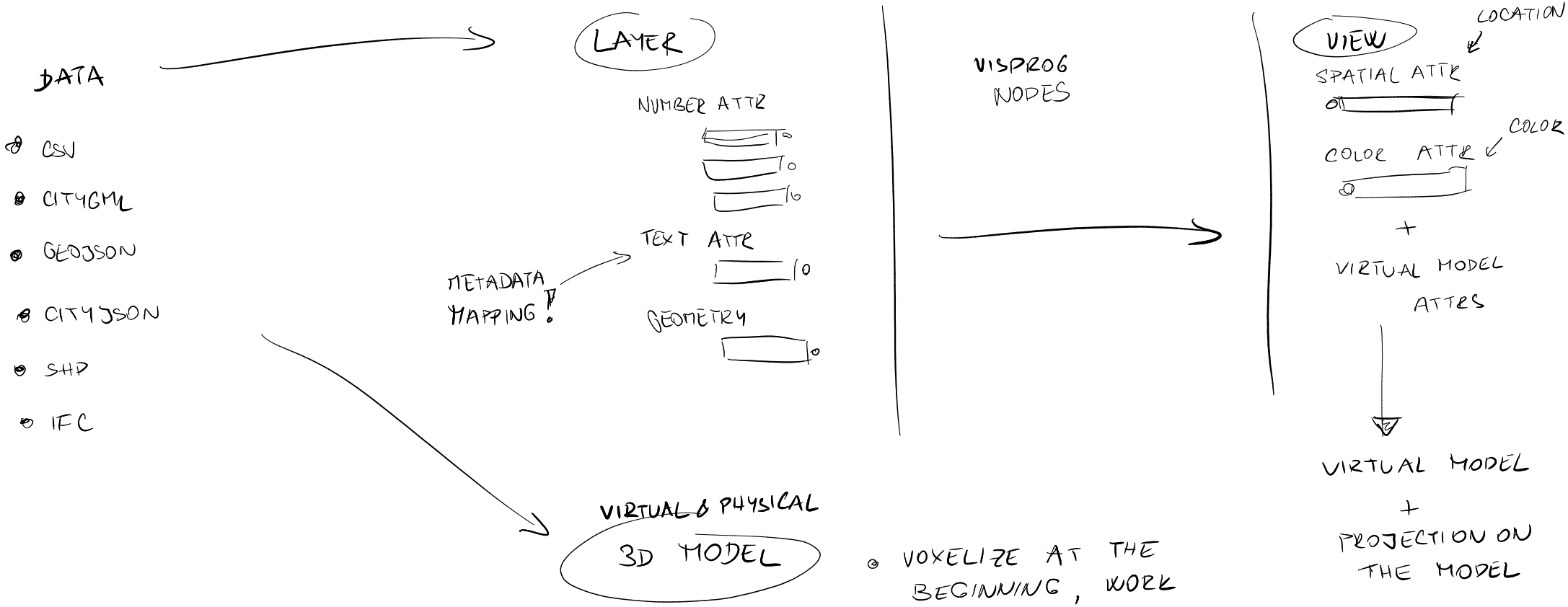
PIPELINE

LAYER
- set of points, paths or areas with additional attributes

→ STYLE
- maps layer to view

→ VIEW
- graphical representation of layer
- fixed number of parameters → virtual model

ARCS, RINS, POINTS ... → projection on top of model




- VOXELIZE AT THE BEGINNING, WORK WITH GRID
- POSSIBLY PRESERVE MODELS FOR VIRTUAL VIEWING

## VIEWS

- GRID - TILE LOCATION + VALUE
- ARCS - START + END + VALUE
- PATHS - TRACE (MULTIPOINT PATH) + VALUES AT POINTS
- POINTS - LOCATION + VALUE ← GLYPHS!
- HEATMAP (CONTINUOUS) — CONTINUOUS SCALAR FIELDS