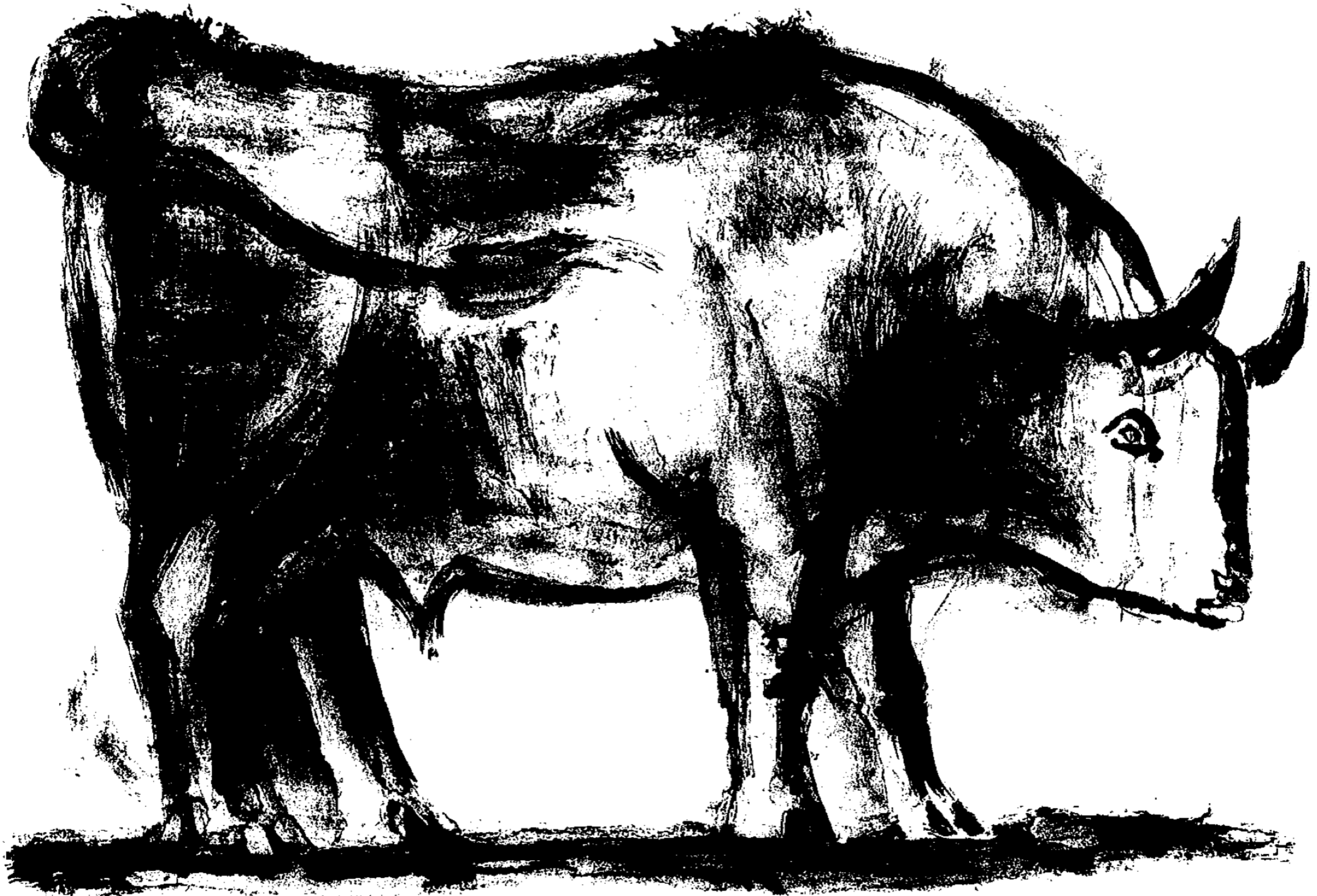


Mensch-Maschine-Interaktion



Kapitel 12 - Skizzen und Prototypen

- Eigenschaften von Skizzen
- Eigenschaften von Prototypen
 - Auflösung und Detailgenauigkeit
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- Video Prototypen



Mathematische Beweisskizze

Theorem There does not exist r in \mathbf{Q} such that $r^2 = 2$.

PROOF SKETCH: We assume $r^2 = 2$ for $r \in \mathbf{Q}$ and obtain a contradiction. Writing $r = m/n$, where m and n have no common divisors (step 1), we deduce from $(m/n)^2 = 2$ and the lemma that both m and n must be divisible by 2 (steps 2 and 3).

ASSUME: 1. $r \in \mathbf{Q}$
2. $r^2 = 2$

PROVE: False

1. Choose m, n in \mathbf{Z} such that
 1. $\text{gcd}(m, n) = 1$
 2. $r = (m/n)$
2. 2 divides m .
3. 2 divides n .
4. Q.E.D.

Leslie Lamport:
How to Write a Proof,
Digital Equipment Corporation 1993

<http://research.microsoft.com/en-us/um/people/lamport/pubs/lamport-how-to-write.pdf>

Skizze in einer Patentschrift

United States Patent
Application
20100081477

Motorola, Inc.

**PORTABLE DEVICE
DISPLAY
PRESENTING TWO
AND THREE
DIMENSIONAL
IMAGES**

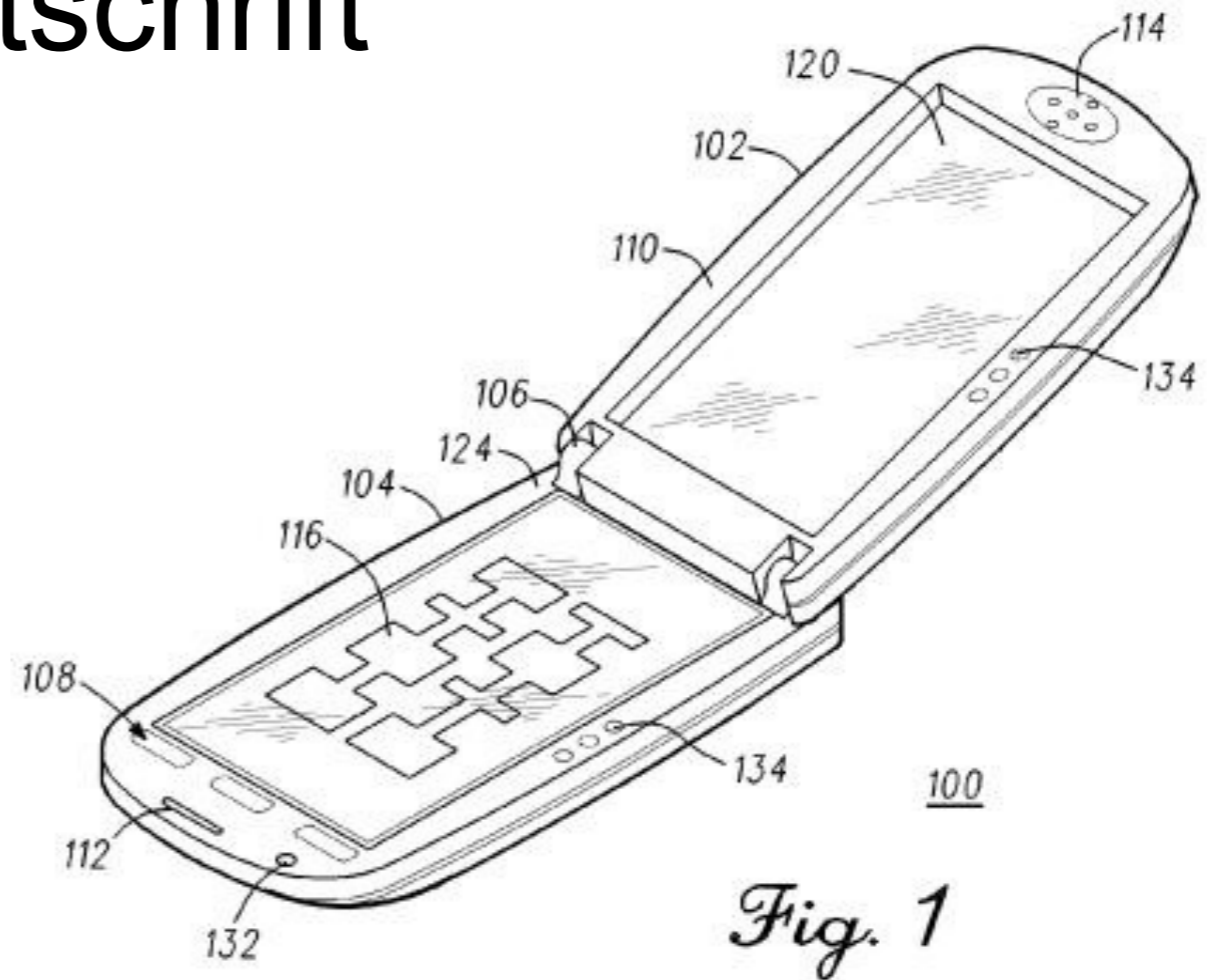


Fig. 1

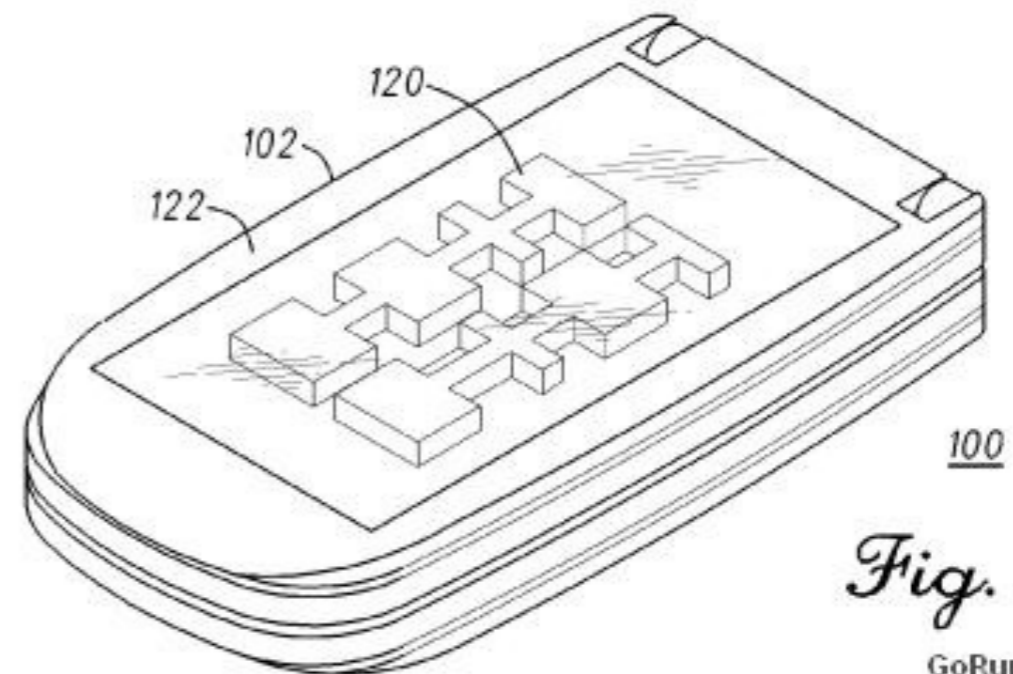
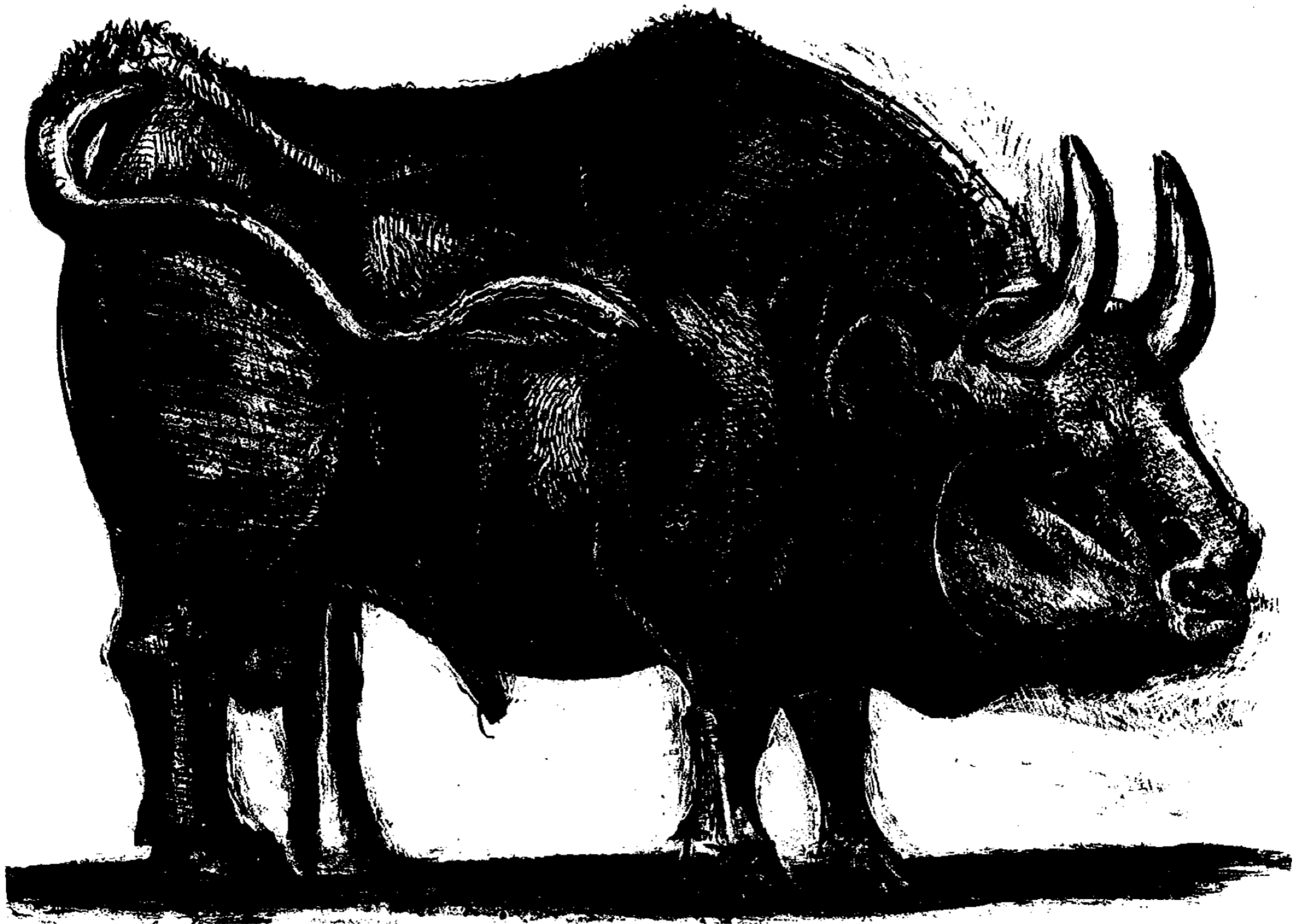
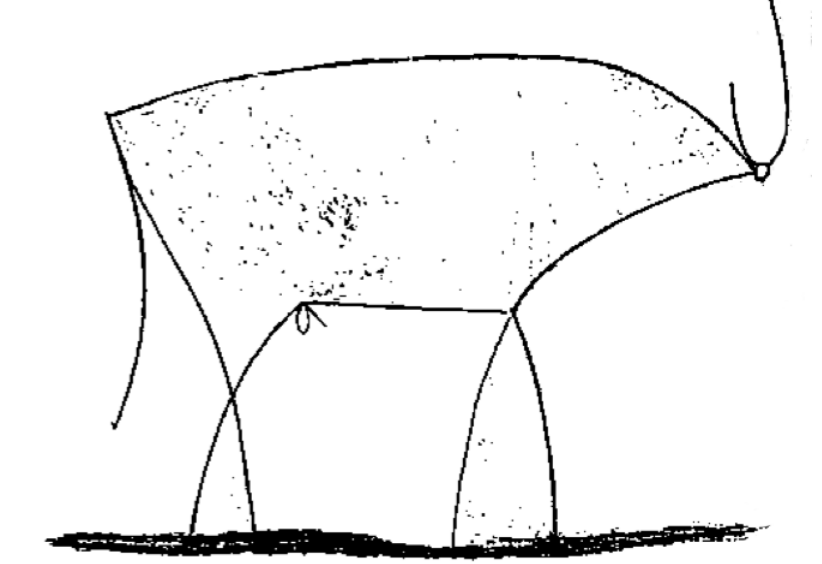
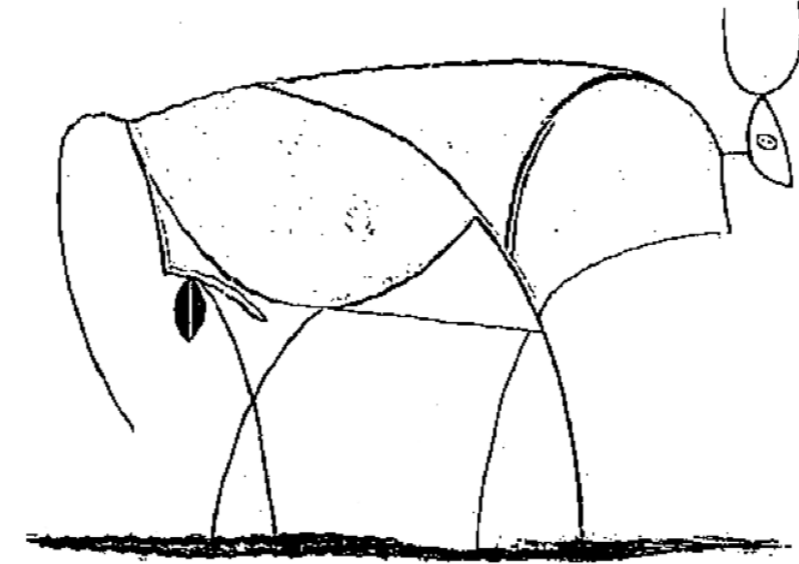
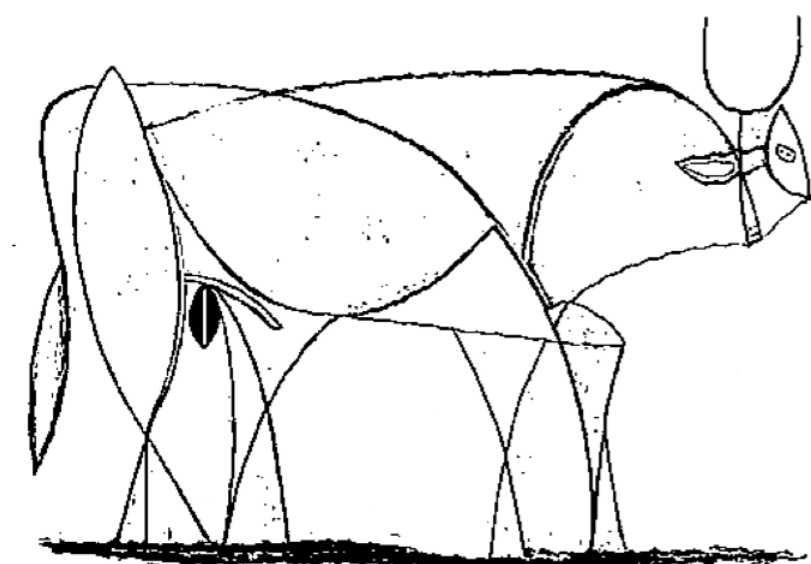
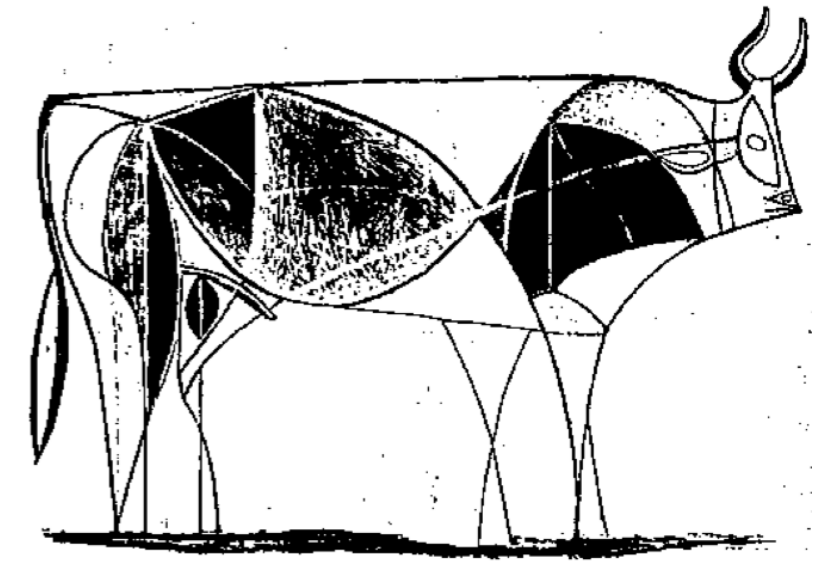
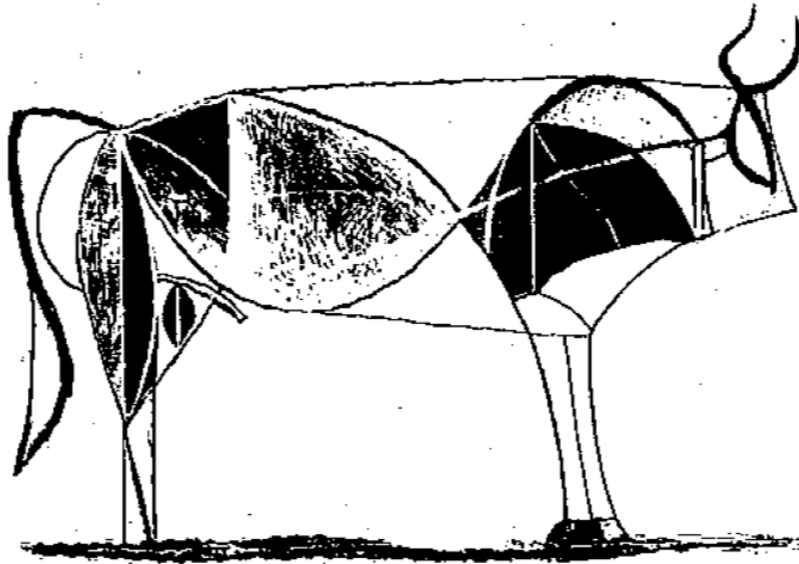
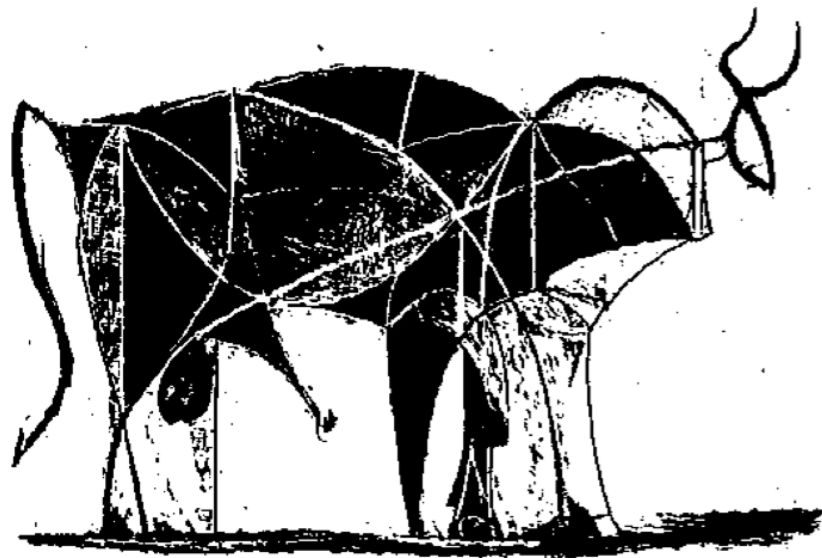
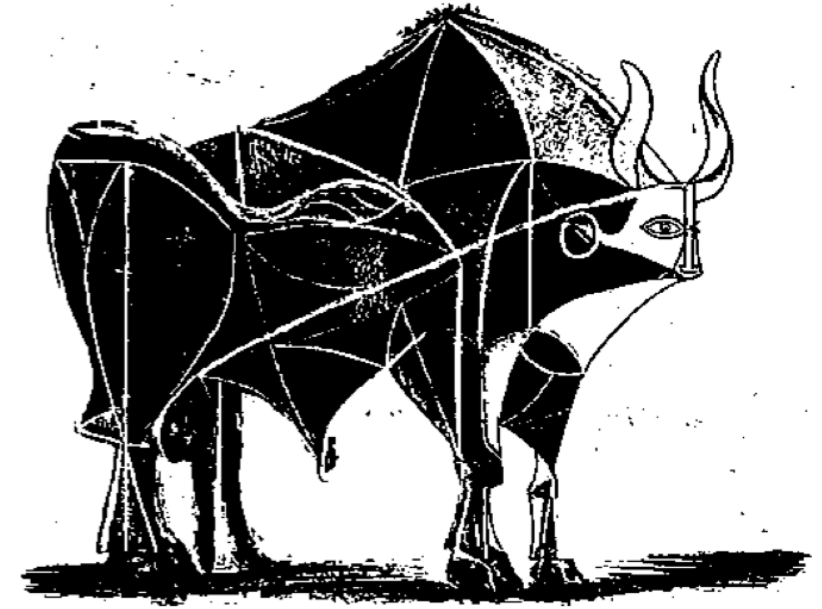
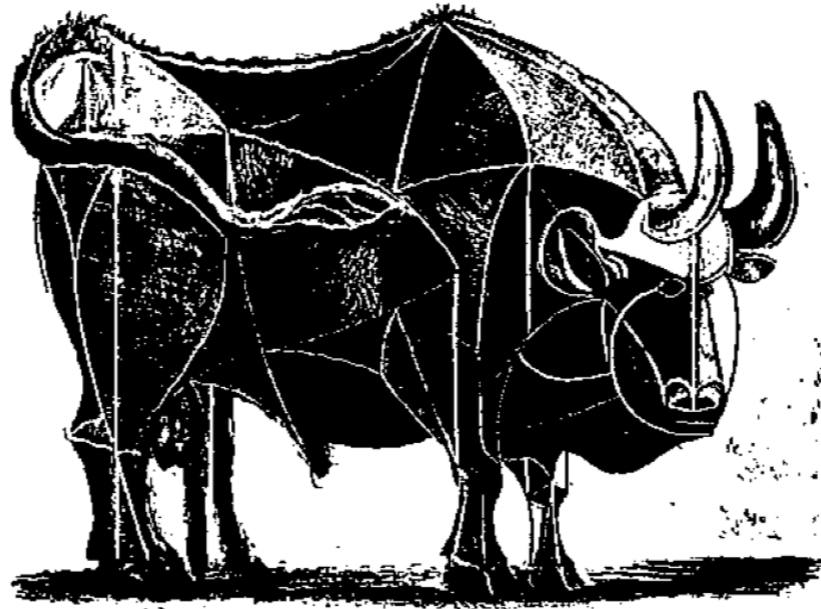
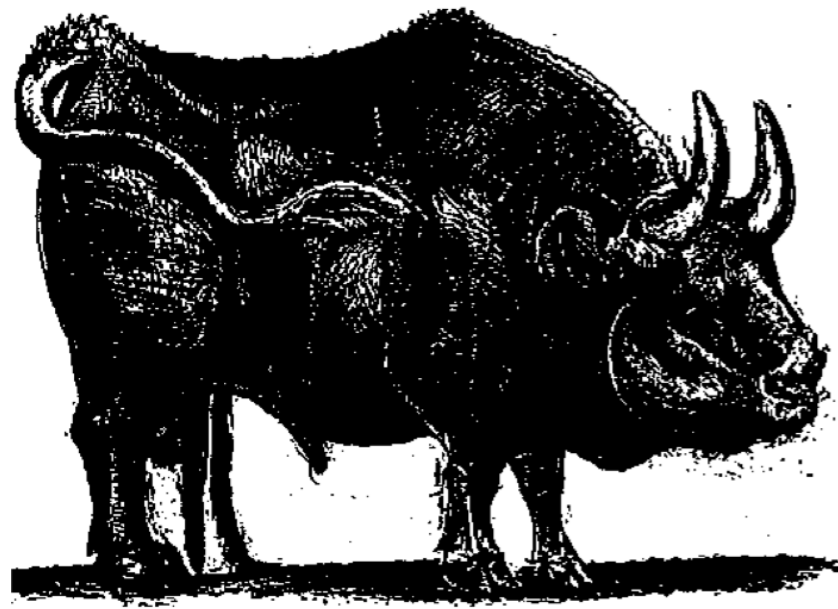


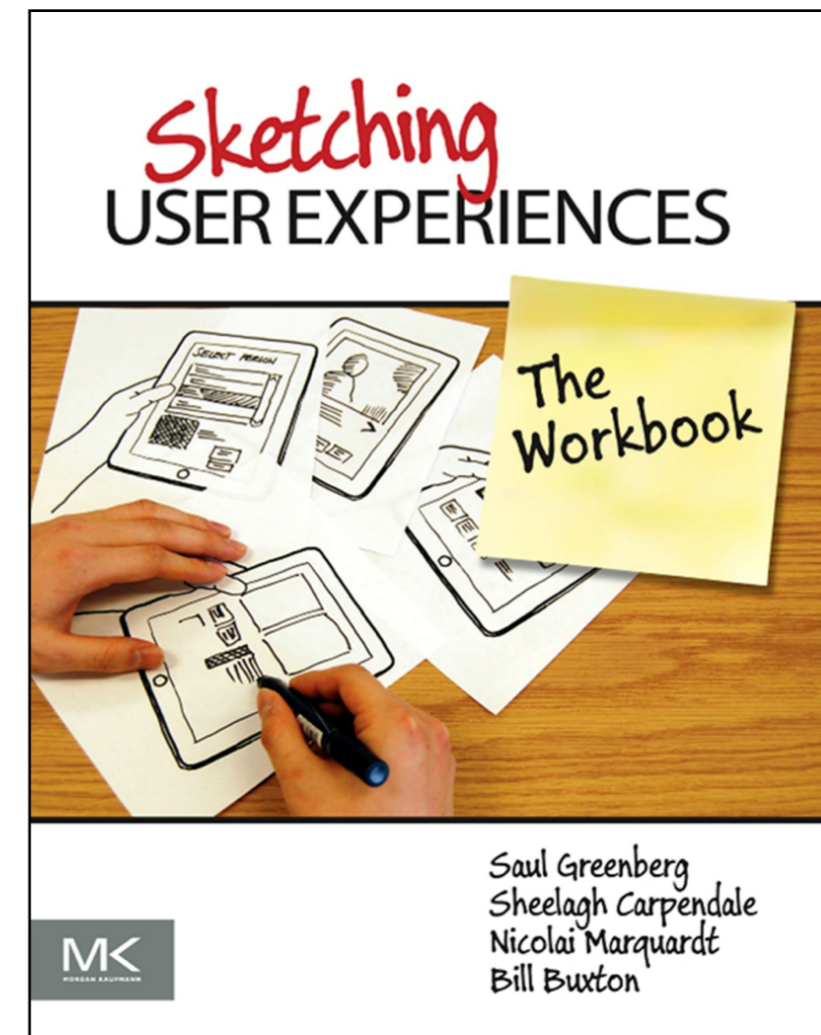
Fig. 2

GoRumors.com





- Quick
- Timely
- Inexpensive
- Disposable
- Plentiful
- Clear vocabulary
- Distinct gesture
- Minimal detail
- Appropriate degree of refinement
- Suggest and explore rather than confirm
- Ambiguity

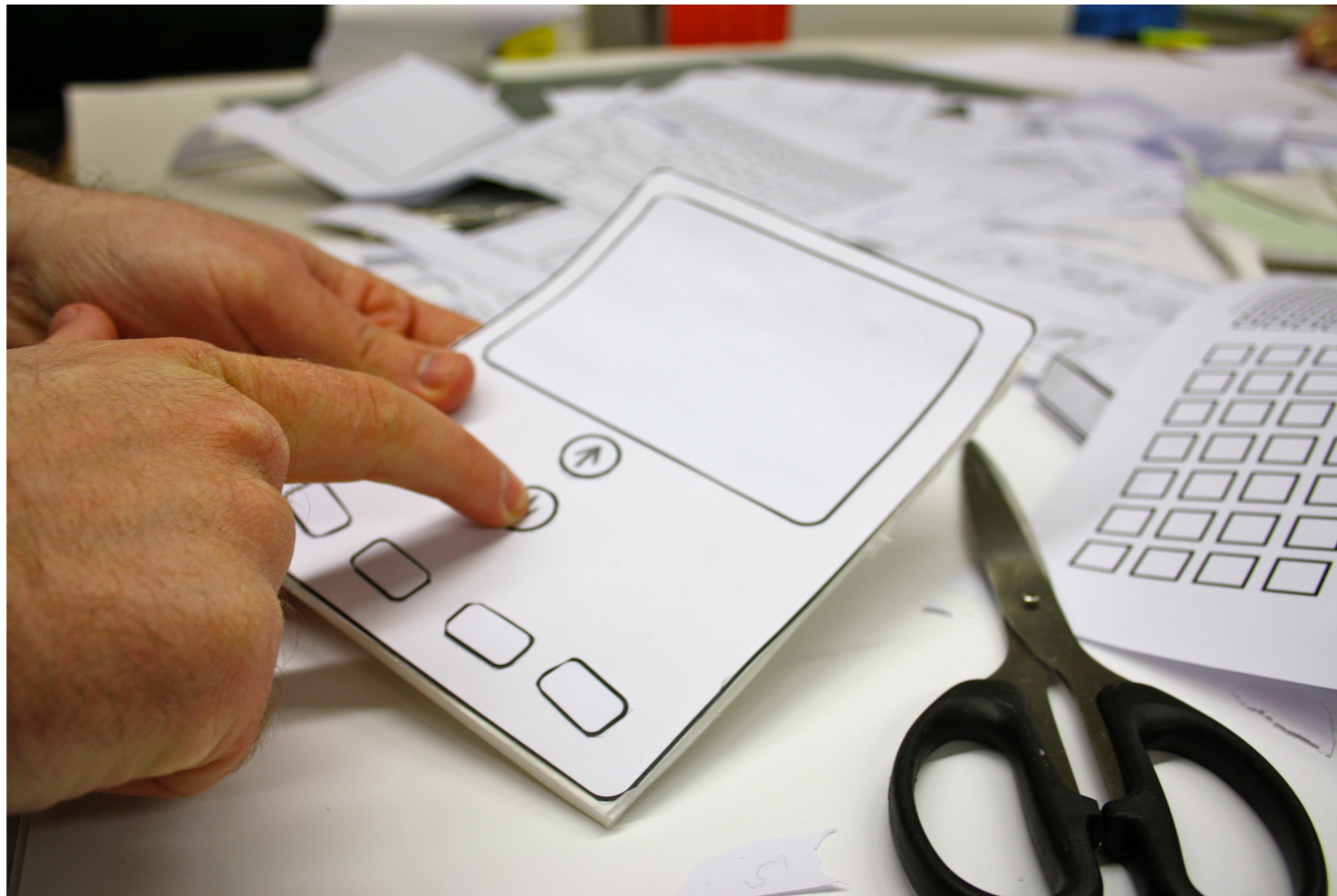


Kapitel 12 - Skizzen und Prototypen

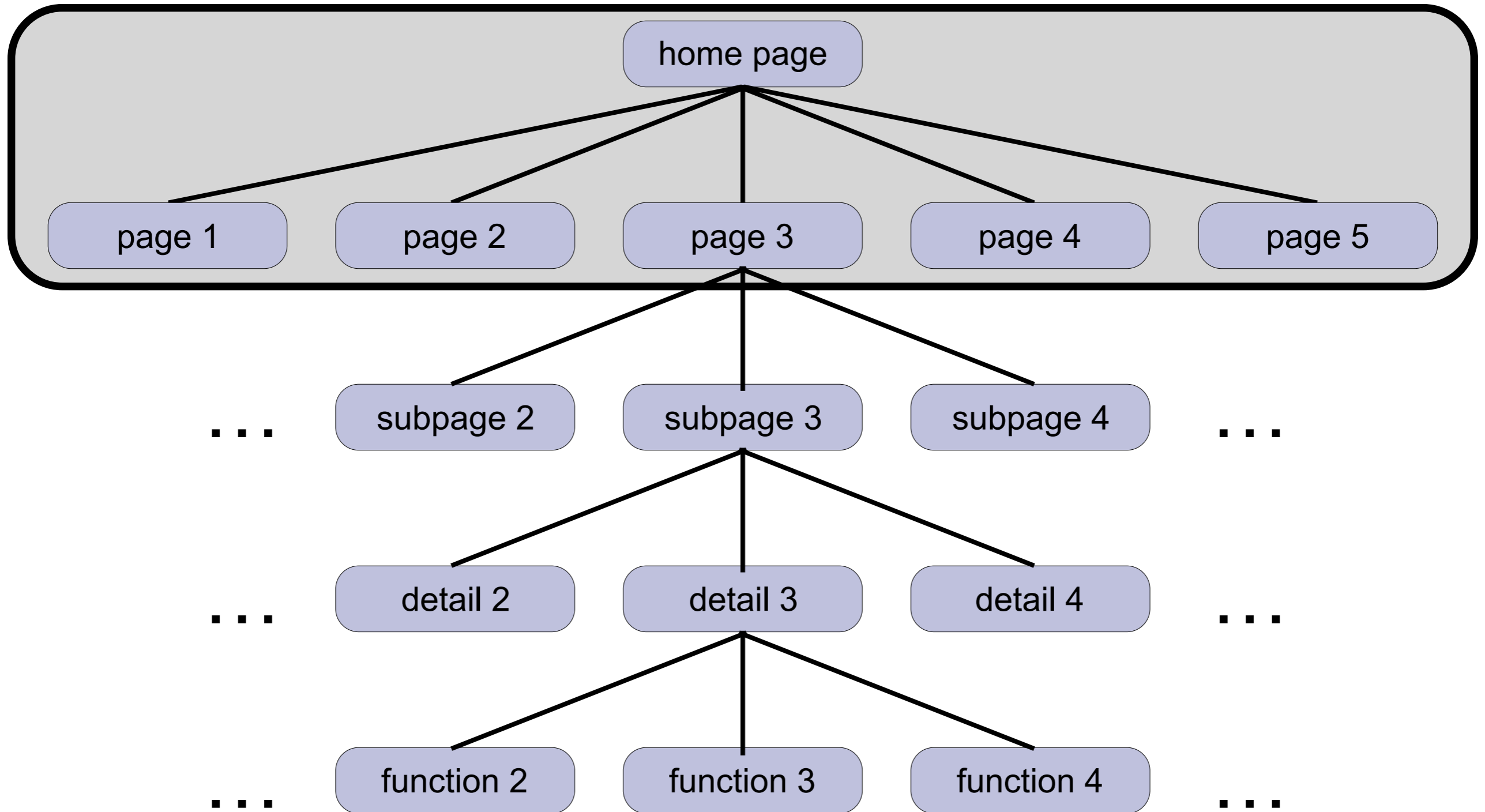
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Auflösung und Detailgenauigkeit

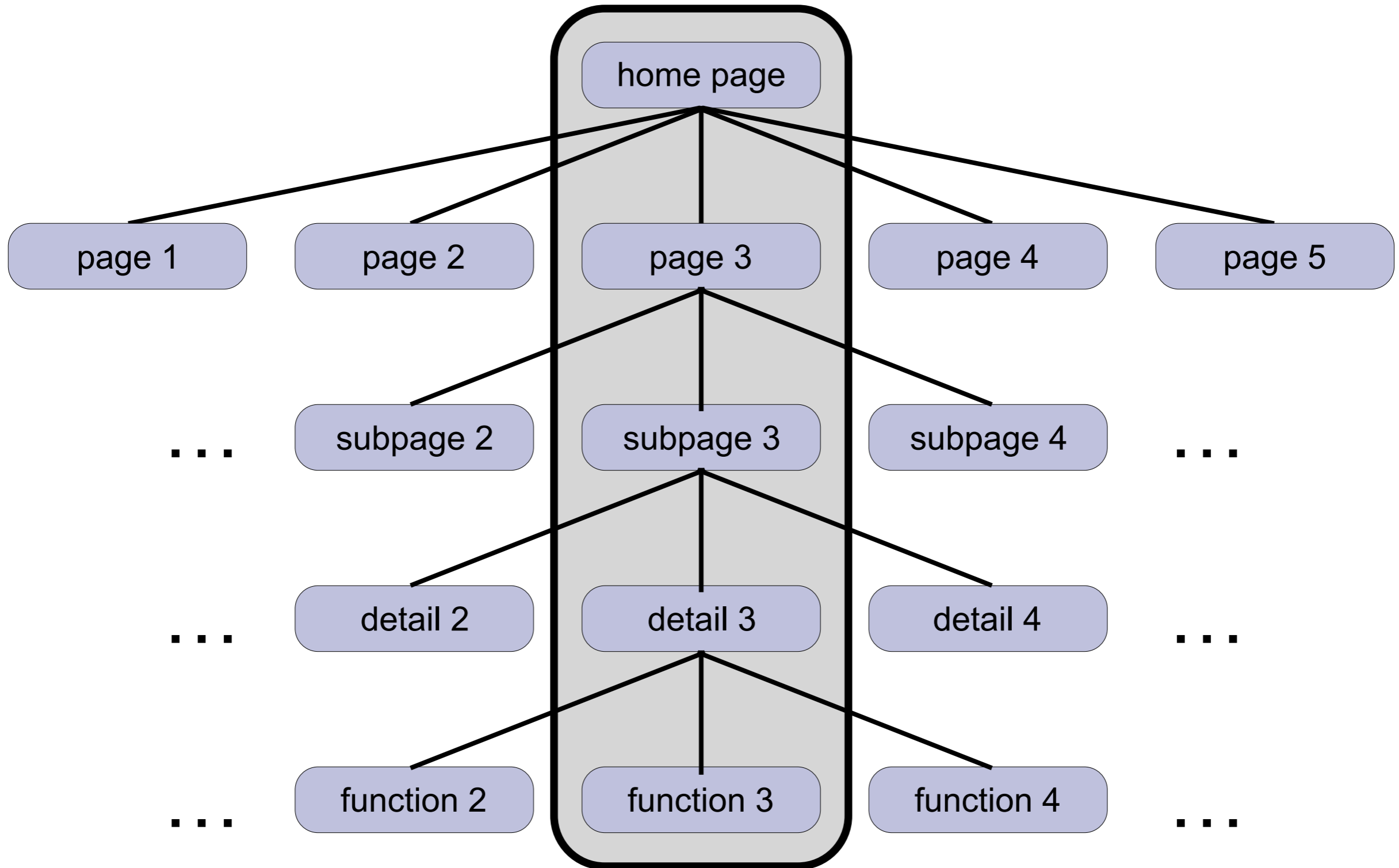
- Houde, Stephanie und Charles Hill: What Do Prototypes Prototype? In: Helander, M., T. Landauer und P. Prabhu (Herausgeber): Handbook of Human- Computer Interaction. Elsevier Science B.V., Amsterdam, 2. Auflage, 1997.
- **Auflösung = Gesamtumfang der Umsetzung eines Prototypen (z.B. nur 1 Screen vs. komplettes System)**
- **Detailgenauigkeit = Detailtreue der Umsetzung (z.B. Strichzeichnung oder photorealistisches rendering)**



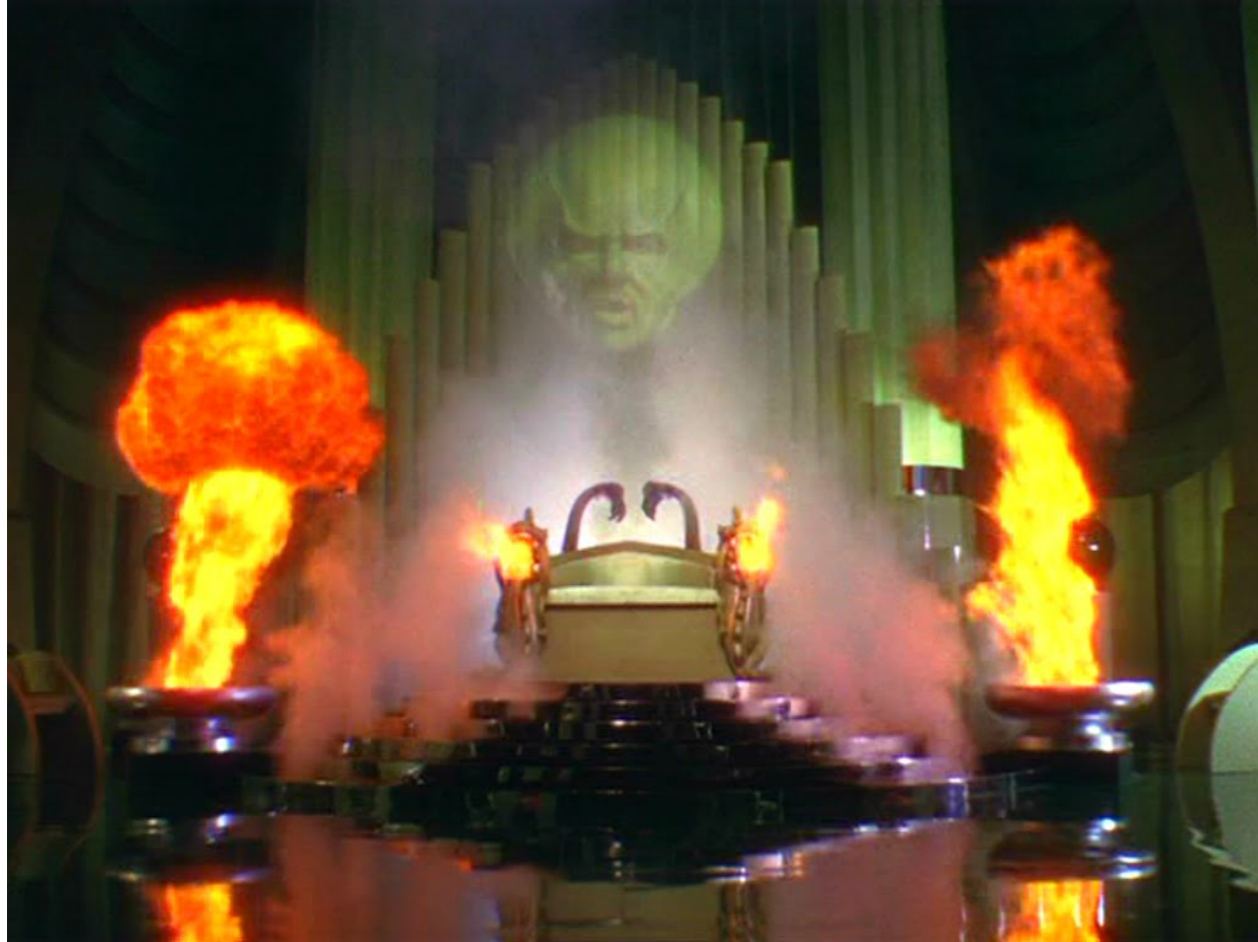
Horizontale Prototypen



Vertikale Prototypen



Wizard of Oz Prototypen

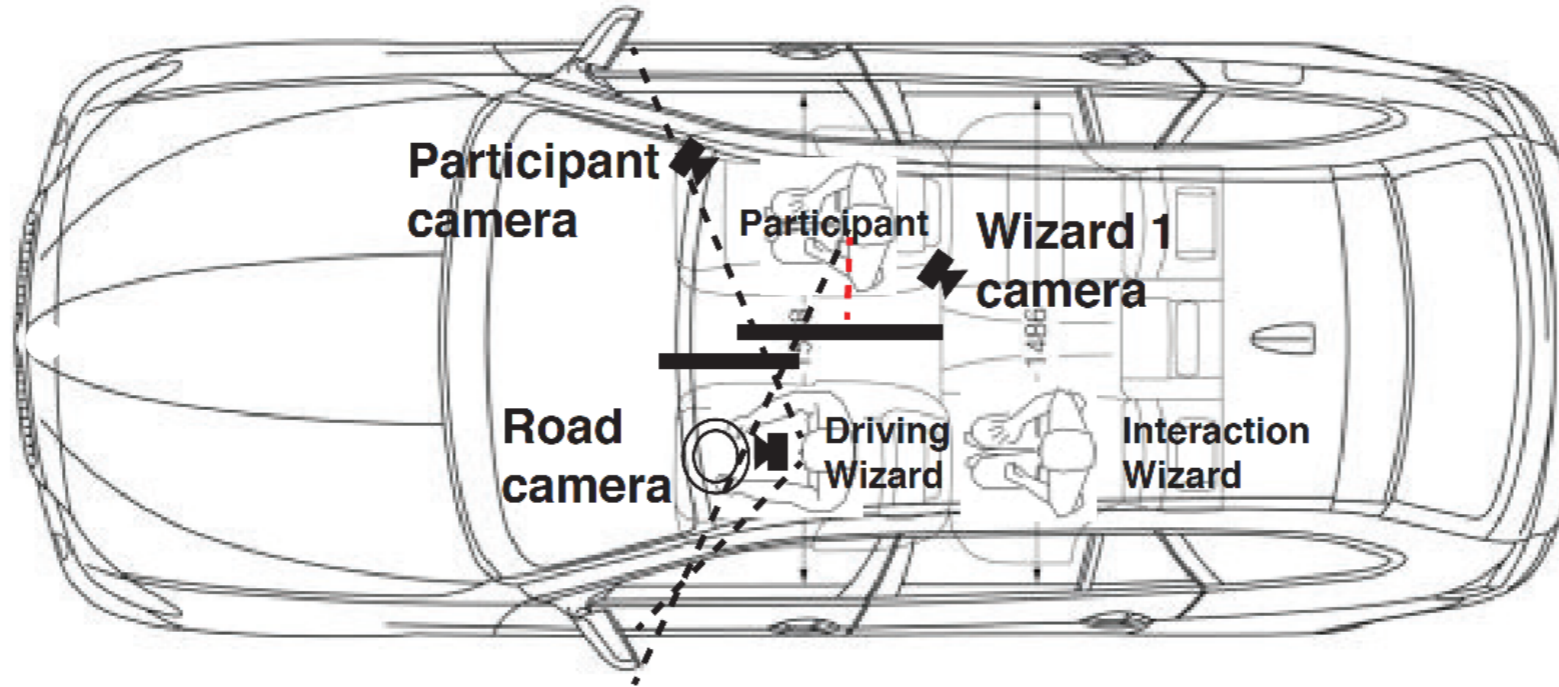


http://2.bp.blogspot.com/_QJDOQQGmSDU/TKwCEkgJsci/AAAAAAAAADxY/LINhk8BF4pQ/s1600/wizard_of_oz_1092_wizard.jpg



<http://dailycapitalist.com/wp-content/uploads/2012/07/Wizard-of-Oz.jpg>

Example: Autonomous Driving



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COLORING PAGES



CATS

16 PICTURES



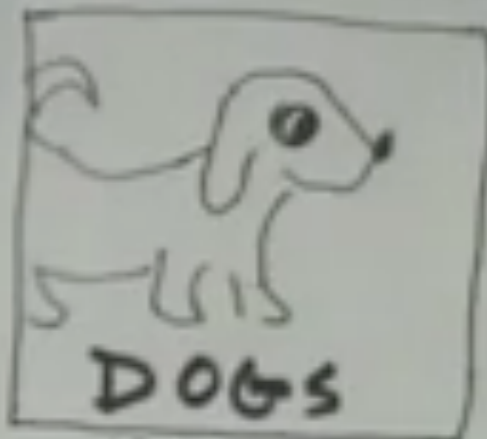
PANDAS

14 PICTURES



GIRAFFES

27 PICTURES



DOGS

13 PICTURES



WORMS

25 PICTURES

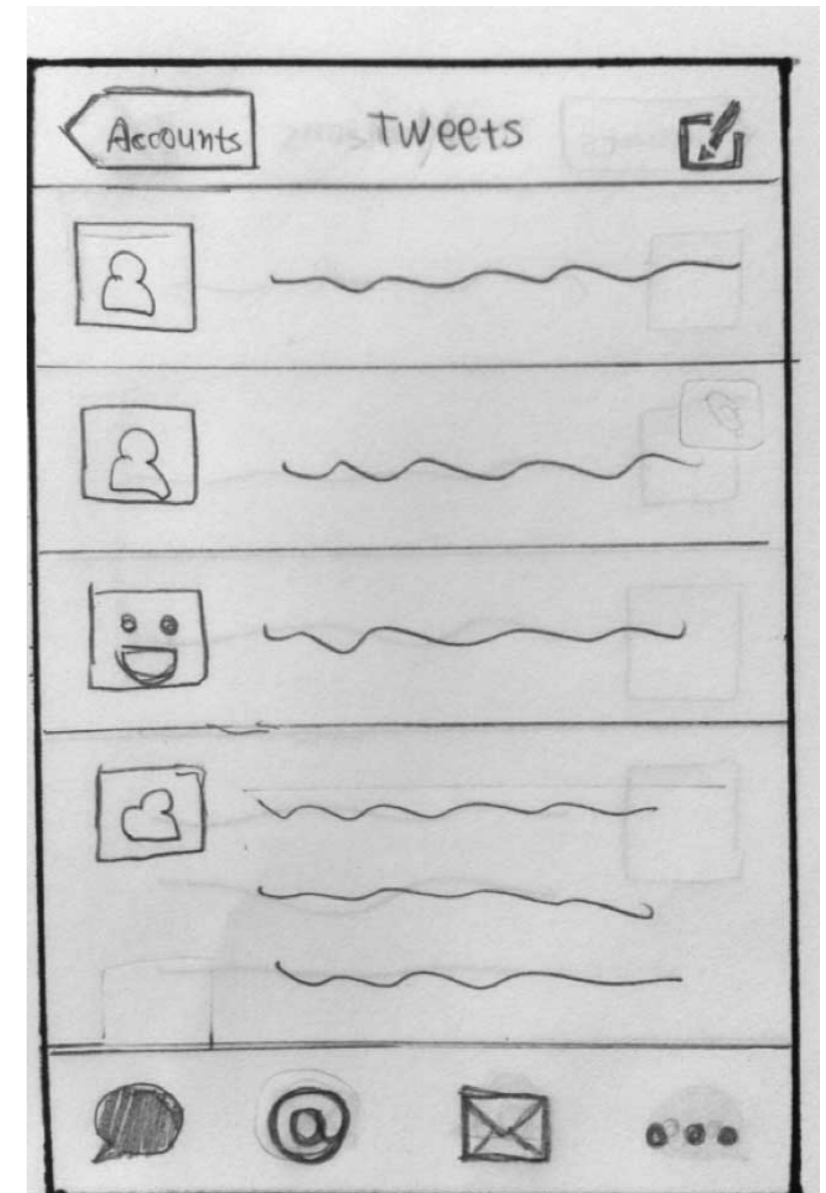
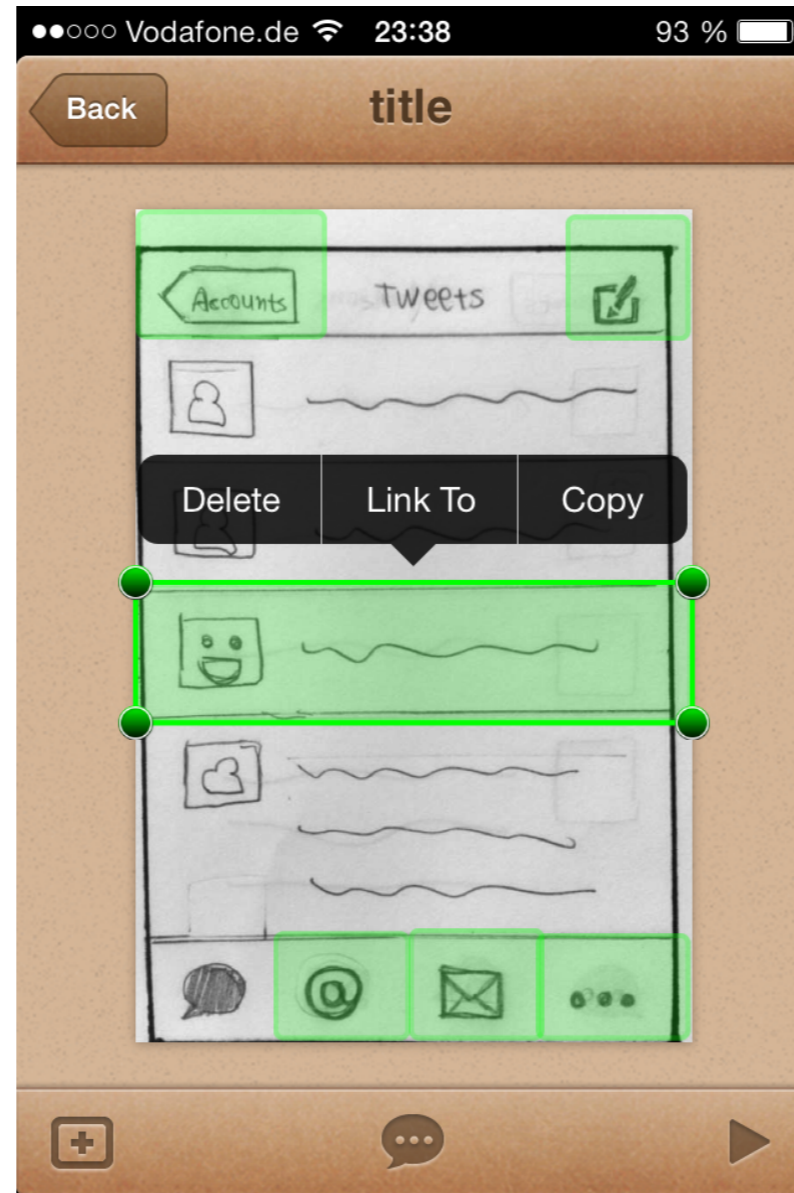
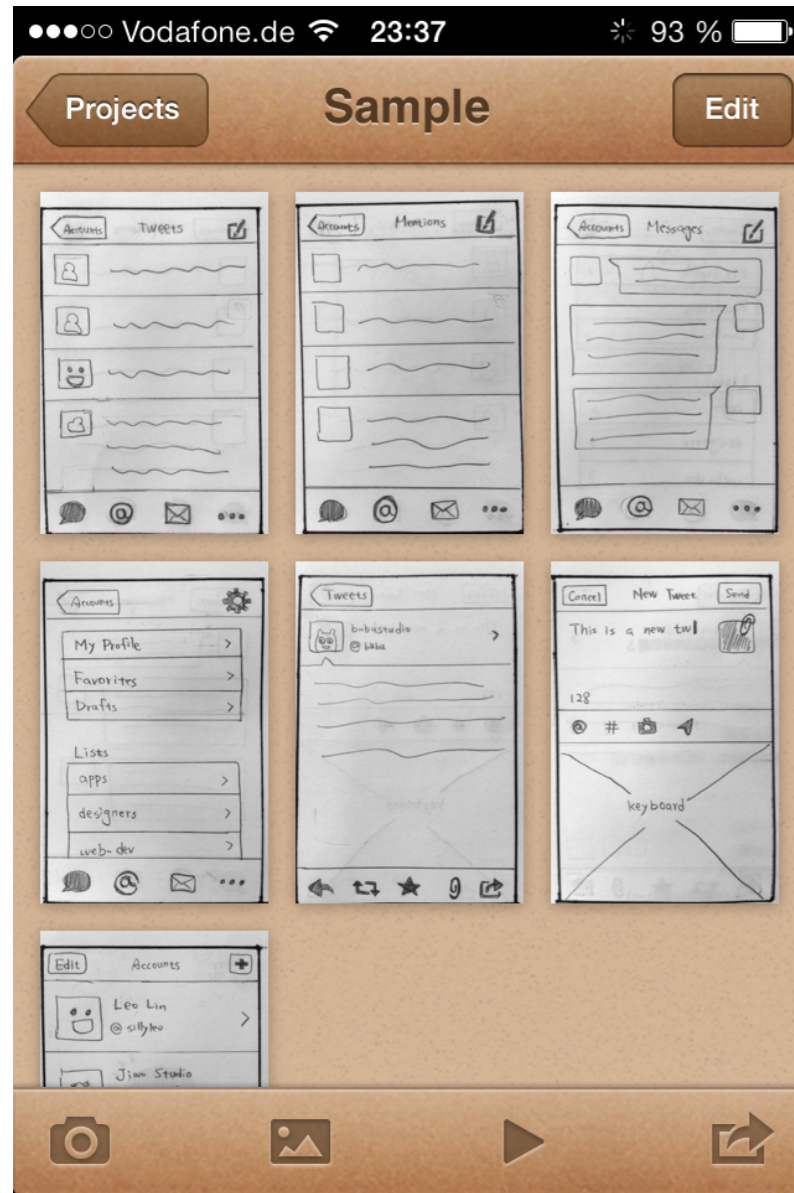


TURTLES

<https://www.youtube.com/watch?v=9wQkLthhHKA>



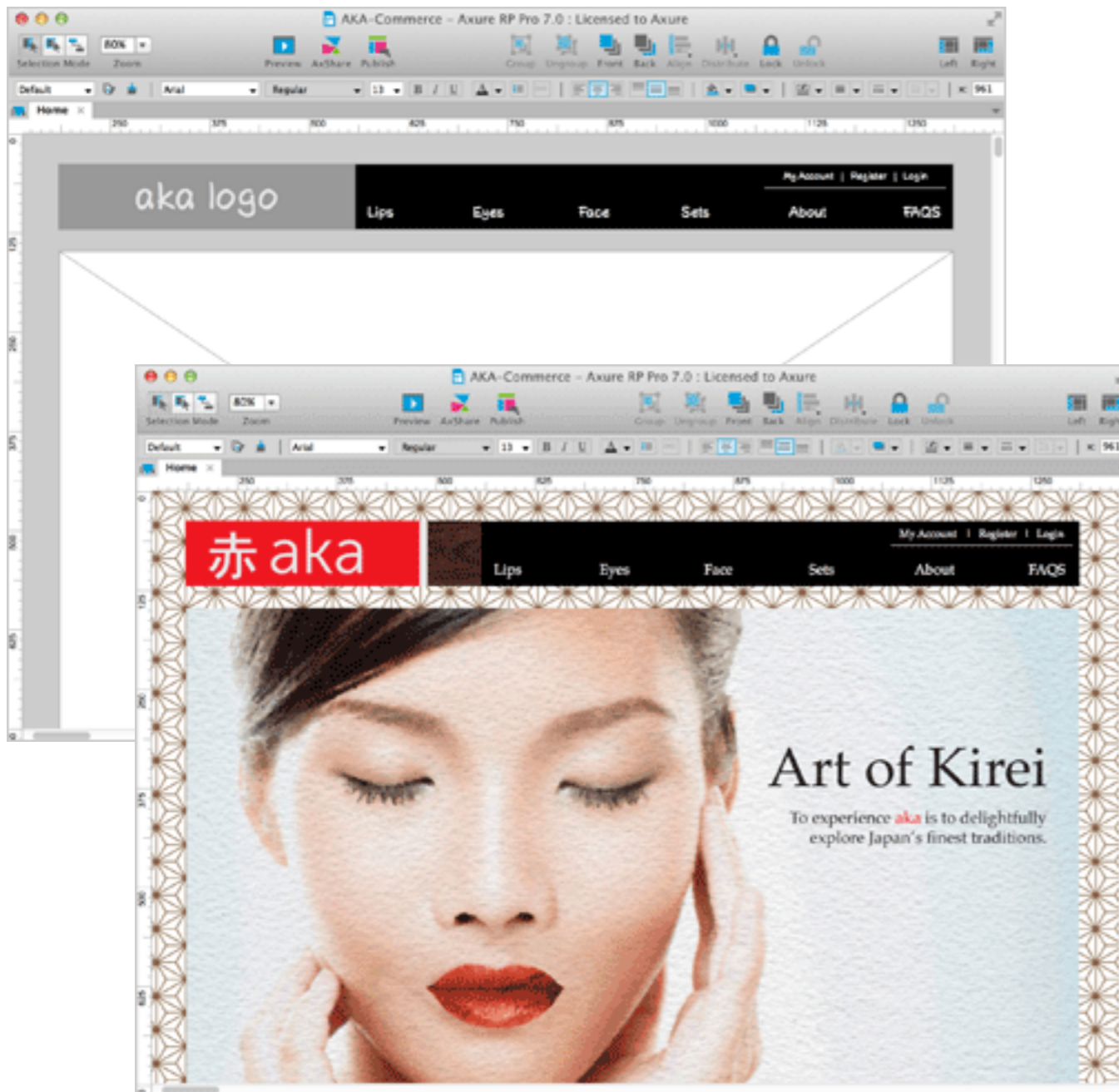
POP App (Prototyping on Paper)



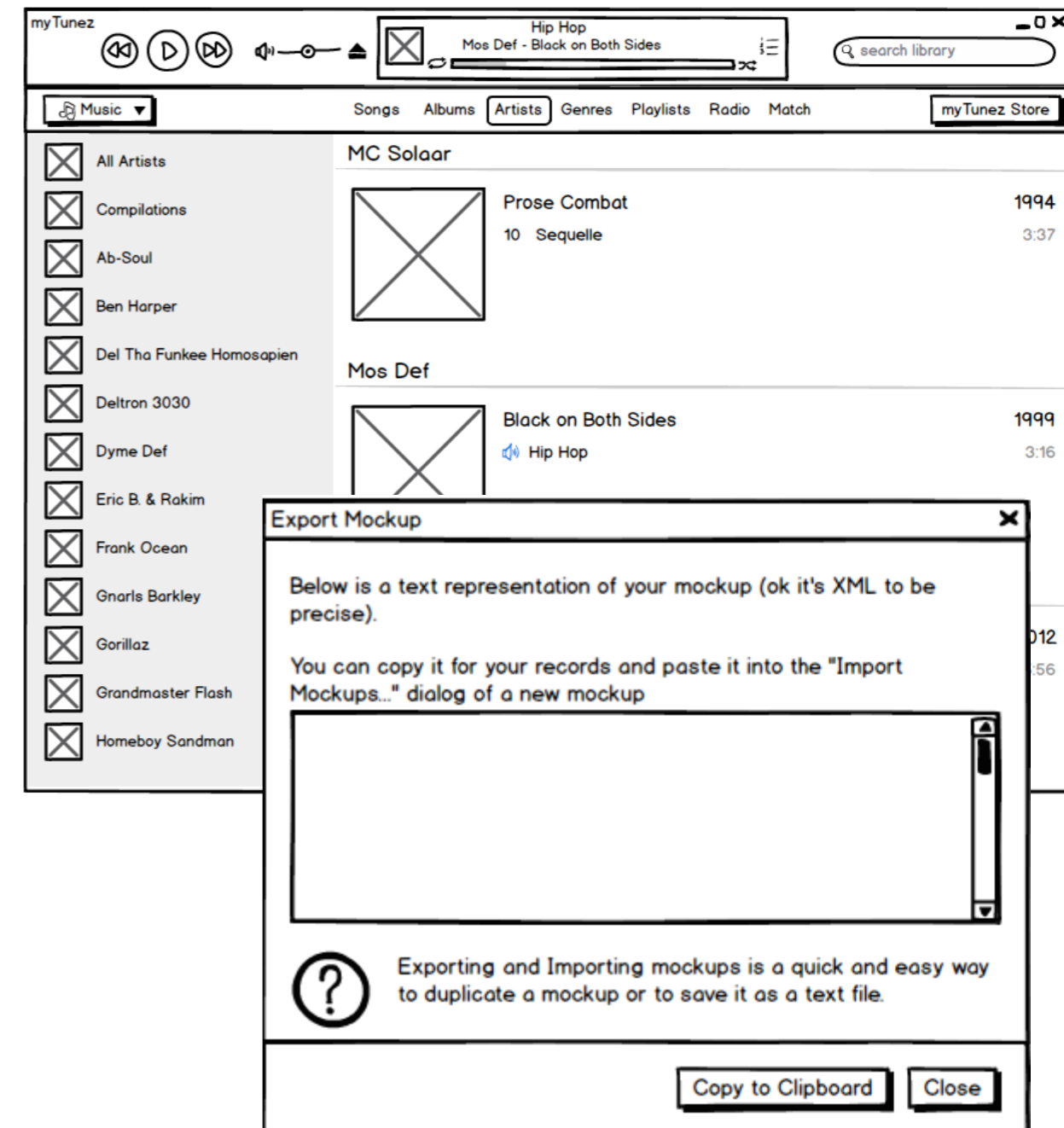
<https://popapp.in>

Rapid Prototyping & Wireframing Tools

- SW zur Erstellung von Interface-Prototypen (“mockups”)
- Bekanntere Beispiele: Axure, Balsamiq



www.axure.com



Kapitel 12 - Skizzen und Prototypen

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<http://www.asktog.com/starfire/>