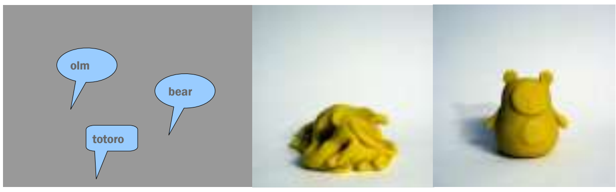
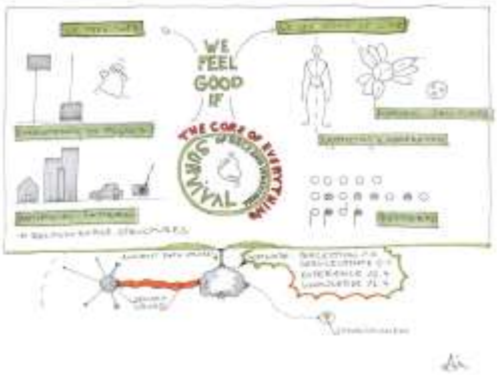
WHY we do WHAT we do



1. Shapes – How do we perceive and judge shapes



Human ancient heritage and experiences

- influence how we perceive and judge shapes
- influence how we can develop shapes
  → which options we have as designers

2 basic possibilities:

Work **with** known patterns, structures

Work **against** known patterns, structures

→ but totally chaotic shapes evoke feeling of insecurity or rejection

Composition and gestalt rules

- remember composition, line and meaning
  → 1st sem. graphic
- remember gestalt principles, visual perception
  → 1st sem. photography

These aspects also apply on 3D shapes

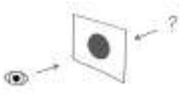
Most important difference

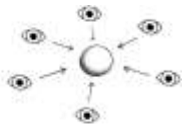
2D

- 1 main viewing direction

3D

- can be viewed from every angle
- you can go around your object
- every side has it's own „right“ to exist

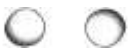




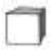
4 WHY we do WHAT we do ...

Position

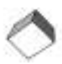
- most simple 3D shape: sphere
  → same curve in every point
  → looks exactly the same from every angle
  → when turned, change is not visible



- stable, balanced
- perfect
- many associations, but no specific one



- stable
- calm, safe



- unstable
- dynamic
- dancing

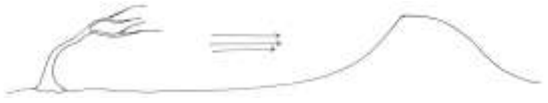
---

4 WHY we do WHAT we do ...

Forces and movement

- in nature (our enviroment) forces and movement are reason for „deformation“
  → how objects are shaped
- forces: pressure, gravitation, water, wind, growth, ...
- result is a shape that is logically and suitable shaped according to this forces
- the process, the effect is visible, even if force, movement itself is not perceiveable

This most often ends up in asymmetrical shapes



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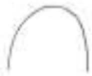
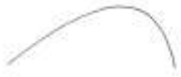
4 WHY we do WHAT we do ...

Forces and movement



- symmetrical
- stable



- asymmetrical
- gives feeling of movement, life
- more interesting
- tension, suspense

---

4 WHY we do WHAT we do ...

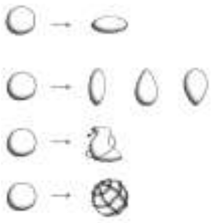
Basic directions of forces and movements

Horizontal

Vertical

Spiralic

Implosion like,
Shrinkage, contraction



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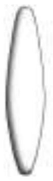
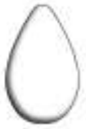
4 WHY we do WHAT we do ...

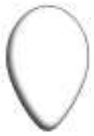
Deformation → association



- thin, upwards
- growing
- eager
- weight is spread evenly



- upwards, but sitting
- weight is at bottom
- according gravitation

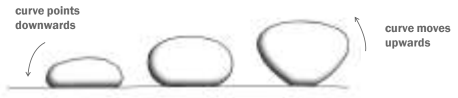


- downwards
- weight is at top
- against gravitation

---

4 WHY we do WHAT we do ...

Deformation → association



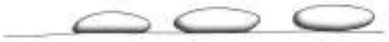
- flat, fat
- sitting, lazy

- fat, plump
- curve very even
- stiff
- immobile

- still bulky but, rising
- small base
- biggest swelling is in the upper part
- dynamic, growth

4 WHY we do WHAT we do ...

Deformation → association



- flat, fat
- sticking to the ground

→

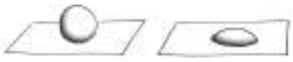
- lifting up
- more moveable

It's all about the details!
Very little differences already change meaning.

---

4 WHY we do WHAT we do ...

Cuts Anschnitte



- drifting upwards
- ascending
- mobile, moveable

- downwards
- sinking
- sticking to the ground
- immobile

---

4 WHY we do WHAT we do ...

Combining shapes – shape

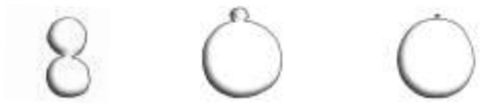
- similar shapes
- symmetric
- calm

- different shapes
- contrast
- tension, suspence

---

4 WHY we do WHAT we do ...

Combining shapes – proportion, size



- similar size
- symmetric
- calm, equal

- different size, contrast
- tension, suspense

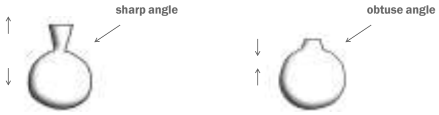
Try to find interesting relation. (e.g. golden proportion)

- difference too extreme
- undecided
- is bothering, like accidental dust speck

---

4 WHY we do WHAT we do ...

Combining shapes – Cuts, incision



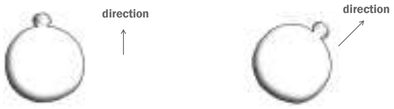
- sharp edge
- not united
- stabbed
- drifting apart

- more smooth edge
- united, unity
- drifting towards each other

---

4 WHY we do WHAT we do ...

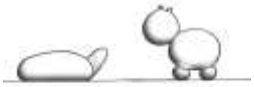
Combining shapes – Position



- symmetrical
- balanced
- stable

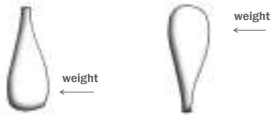
- asymmetrical
- unbalancend
- dynamic

Associations – you can not help it ...



Shape and stability

- shape influences function
  → fact of stability
- shape influences perception
  → feeling of being stable



- weight at bottom	- weight at top
- feels stable	- feels unstable
- is stable	- is (more) unstable

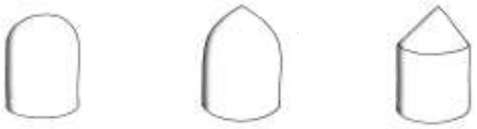
Shape and stability

Examples

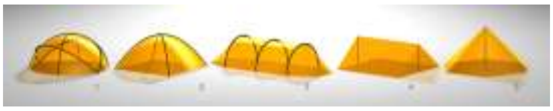
Palmtree

White Desert, Egypt

Shape and stability



Shape and stability



- very stable
- wind stable

→

- less stable
- not wind stable

Shape and stability

Examples

Pigeonry, Egypt

Dome of the rock, Jerusalem

4 WHY we do WHAT we do ...

Conclusion

you need:
- to be human
- symmetry and asymmetry / aberation

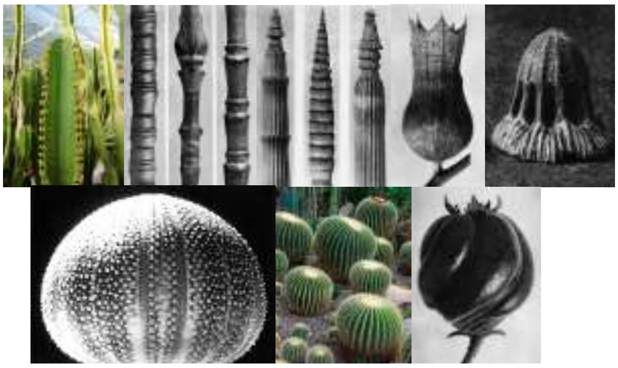
→ the fitting balance between them

to achieve:
- harmonical, balanced
- yet interesting shape

---

4 WHY we do WHAT we do ...

Step 1: Look for inspiration for example in nature...



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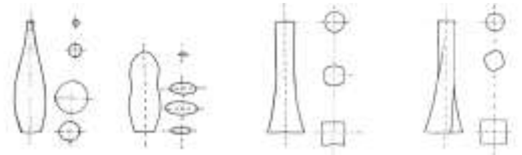
4 WHY we do WHAT we do ...

Step 2: Choose complexity

Increase of complexity →



Change of cross-section:
- size

Change of cross-section:
- size
- shape

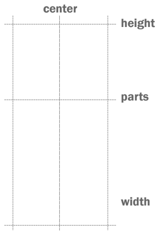
Change of cross-section:
- size
- shape
- position (rotation)

---

4 WHY we do WHAT we do ...

Step 3: Sketch

- start with development of silhouette
- sketch big!
- mark: important guide lines



- think about cross-sections

→ With which would you like to start?

→ With which would you like to end?

---

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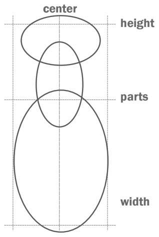

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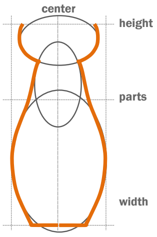

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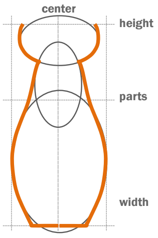

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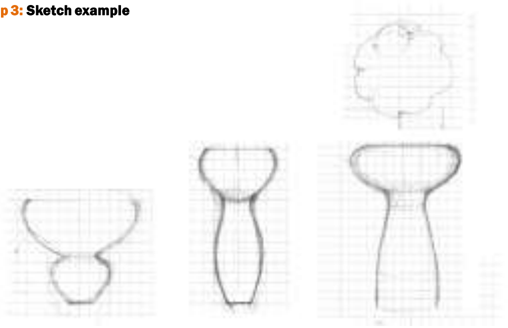
4 WHY we do WHAT we do ...

Step 3: Sketch example



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4 WHY we do WHAT we do ...

Why without color?

- focus is on shape
- neutral color is best to judge shape

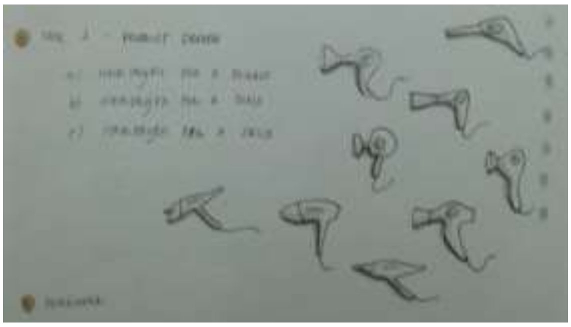
→ grey or off-white

- color, graphics and patterns can enhance or destroy a shape

---

4 WHY we do WHAT we do ...

EXAMPLE: Hairdryer



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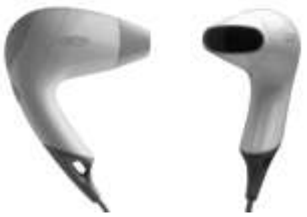
4 WHY we do WHAT we do ...



☐ Male ☐ Female ☐ Child

☐ Girl ☐ Boy

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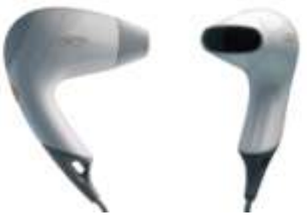
4 WHY we do WHAT we do ...



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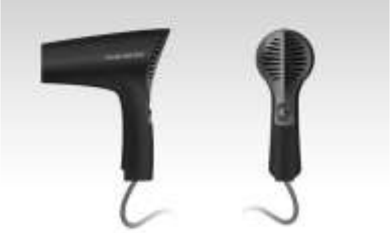

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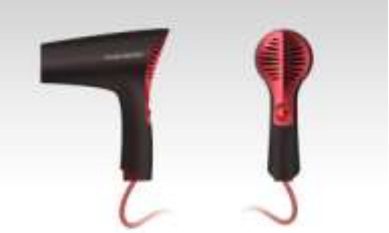

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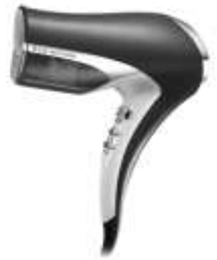

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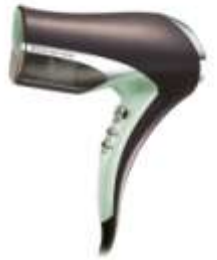

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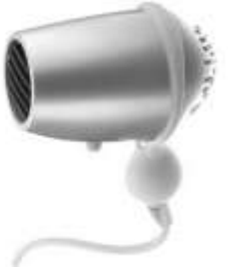

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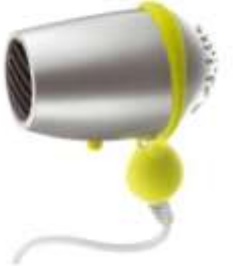

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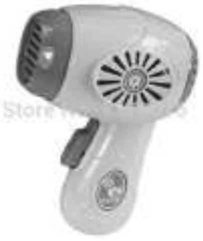

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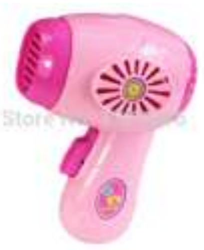

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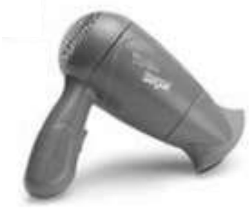

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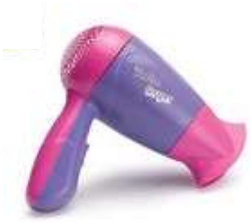

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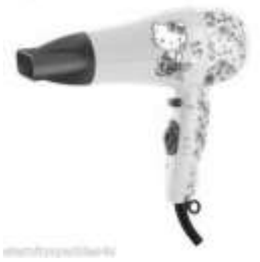

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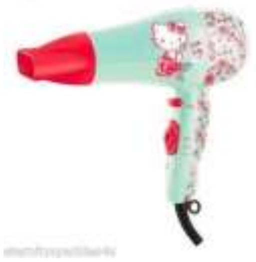

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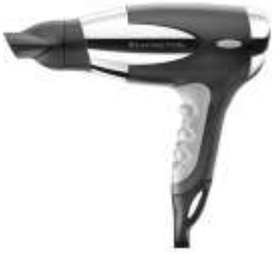

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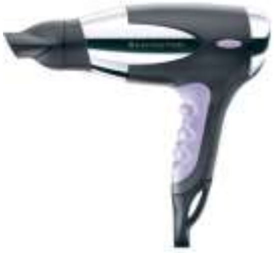

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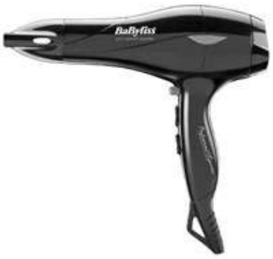

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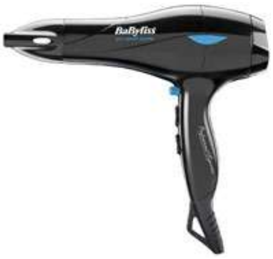

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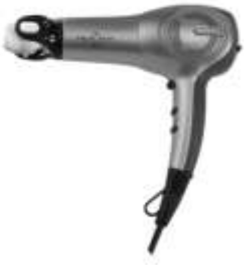

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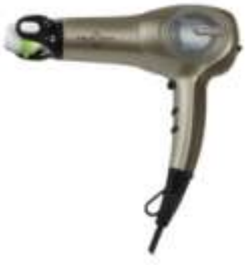

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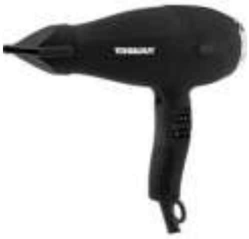

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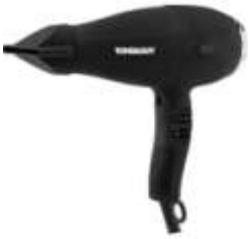

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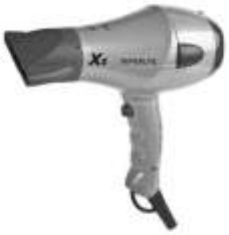
☐ Girl ☐ Boy

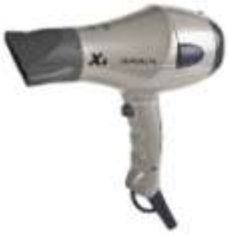
4 WHY we do WHAT we do ...



☐ Male ☐ Female ☐ Child

☐ Girl ☐ Boy

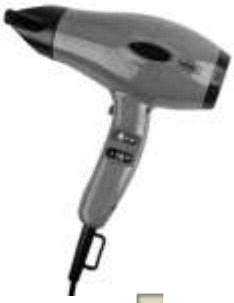
4 WHY we do WHAT we do ...



☐ Male ☐ Female ☐ Child

☐ Girl ☐ Boy

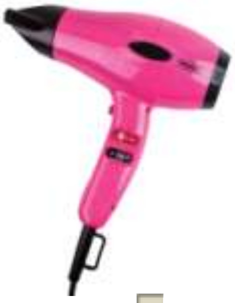
4 WHY we do WHAT we do ...



☐ Male ☐ Female ☐ Child

☐ Girl ☐ Boy

4 WHY we do WHAT we do ...



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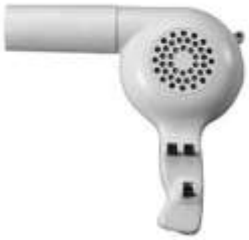
4 WHY we do WHAT we do ...



☐ Male ☐ Female ☐ Child

☐ Girl ☐ Boy

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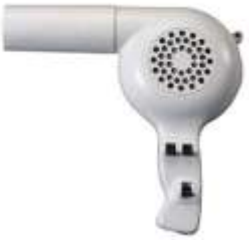
4 WHY we do WHAT we do ...



☐ Male ☐ Female ☐ Child

☐ Girl ☐ Boy

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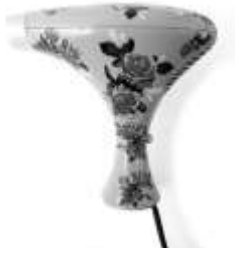
4 WHY we do WHAT we do ...



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☐ Girl ☐ Boy

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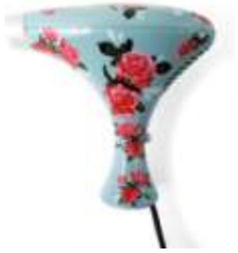

☐ Male ☐ Female ☐ Child

☐ Girl ☐ Boy

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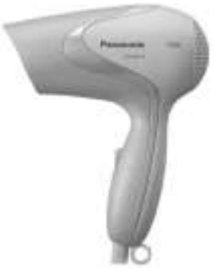

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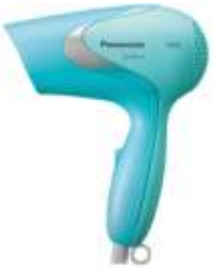

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