Storyboarding for designers and design researchers

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Introduction | why storyboards?

- Complexity: context and time
- Multi-disciplinarity: communicate
- Emotion/Experience: stepping in and stepping back

Introduction | interdisciplinary communication

In Cinema
- Producer
- Director
- Photography (cameraman)
- Lighting manager
- Location selector
- Set designer
- Actors
- Caster
- Special effects
- ...

In product design
- Designer
- Graphic designer
- Client
- User
- Marketing expert
- Services expert
- Usability expert
- Software expert
- Engineering expert
- ...

TUDelft
Introduction | stepping in and stepping back

- You can feel as if you were participating in the story.
- You can look as an outsider to the unfolding event.
- You can switch between these two modes of viewing,...
  ... quickly and often.

Overview | the storyboard cards

- Six cards
- Summarize the ‘theory’
- Used with design students
- But very concise...
Part I | looking at storyboards

- Examples of storyboards from product design, software design, advertising, cinema, and comics.

- Google will find you mainly advertising and cinema.

- Questions:
  What do you see?
  What questions do the storyboards answer?
  What questions do the storyboards trigger?
Robin Hoenderdos: Connection of mother and child

Cactus poster: Scenarios for mobile appliances
Cactus: the coffeebreak sketch

Cactus: developing the poster
Mike van der Geer: a Radiology workstation

"Hij rolt de filmlet op en legt er door de
luzoon de reageer-fenomenen in glaswic en
de leukop o p linken die op het scherm verschij-
nen. De invloedering gaat direct met het
inge-geven en de schijf is ingevuld."

"Hij vraagt: "Is er een bijhorende klasse op
onze naam?" Dubbelzinnig."...

"Op het scherm verschijnt een visualisatie van zijn
aangeduide patronen, de kleur van normale en van
aanneembaar. Daarop komt de aanbeveling dat hij
naar de kantoor aan de gang
comeet om die, nommerens van het
goede u te geven."...

Bart Hengeveld: Product concepts

"De gegevens van patiënt kliënten worden op
het scherm geplaatst. Hij wordt snel in de
filosofie de stapjes aan waarbij hij vaak een idee in het
ontwerp op knippert en hij vraagt later."...
Nick Parks: Wallace & Grommit animation

Advertisement: one extra example...
Part II | theory on storyboards

Linguistic approach:
• Syntax: what form do they have (should...?)
• Semantics: what information do they convey
• Pragmatics: how are they used

Syntax | montage & page layout

• Flipbooks, novels, or pages.
• Pages, lines, and panels
• Grids & borders (?)
• Subscript text region
• Tips:
  - use loose pages, one story each
  - make variant stories
  - leave room for annotation
Syntax | ‘camera handling’

- Camera shots:
  - Establishing shot
  - Medium range shot
  - Close-up
- For product design:
  - mostly medium range shot
  - few close-ups of faces

Syntax | showing people

- Drawing detail should reflect level of concern
- Choose your style
- Draw facial expressions and posture expressions
- Drawing detailed hands is difficult
Syntax | text

• Tips:
  • Text balloons distract
  • Use subscripts to
    - strengthen storyline
    - explain ‘undrawables’
    - compensate for limitations of drawing skills

Syntax & semantics | style

• Expressive, symbolic, realistic

• Tips:
  - First decide what’s your message?
  - do you want to convince the reader, or invite constructive questions or suggestions?
### Semantics | people will fill in

- Leave out distracting details
- Leave holes in stories
- Lead the reader

**Tips:**
- leave out ‘the product’
- mix styles (e.g. Manga heroes are cartoonish on a realistic background, to make the reader identify with the hero)

### Semantics | what information is carried?

- all Aristotle’s questions:
  - who (and with who, to who, ...)
  - where (place, situation, state)
  - what (the product)
  - when (and how long)
  - how

...
Semantics | narrative and dramatic tension

- Keep stories compact (make a point)
- Allow overview and avoid breaks (page-turns, short lines, use ‘landscape’ instead of ‘portrait’)
- Use textual annotations

Source: Laurel
Related | cinema & advertising

- The historical source of storyboards
- Much experience in multidisciplinary use, and expressiveness
- Difference: the movie/story is the goal, in product design only a tool;

Sources: Katz, Boorstin, ...

Related | comics

- Great inspiration
  - styles, layouts
  - (facial) expressions
  - use of colour and background
- Difference with product design:
  - the story is the goal; in product design, the story is a tool.
  - style can be a goal in itself in comics.

Sources: McCloud, ...
Related | scenario/persona-based design

- Stories as lines integrating and relating design ingredients;
- Appeal to experience through concrete level of narration, focus on actions/processes, not objects;
- The advantages of visual form:
  - parallel (many stories on the table)
  - compact
  - direct
- Limits:
  - still need verbal explanation
  - need visualisation skills
Source: Carroll, Cooper ...

Related | user instructions

- Unmistakable narratives;
- Limits: heavy focus on actions, on the product instead of the user, little attention to situation, emotion,...
Source: Mijksenaar, Tufte
Related software storyboards

- From interface design
- Widely used
- Often too much focused on the device, not on context (only screen layouts, no users)
Part III | making storyboards

Pitfalls and dangers

- Pitfalls
  - first draw picture 1, then what?
  - long, drawn out and-then story
  - elaborate pretty drawings

- Cause:
  - not knowing the message
  - not knowing the story
  - not deciding
The process

- Decide the message
- Develop ingredients (actors, situations, actions, events, emotions)
- Sketch ingredients
- Determine storyline span
- Sketch out action and annotation
- Make it pretty

The play-acting technique

Not just to compensate for limited training in drawing:
- Determine ingredients
- Act out the story
- Take digital photos
- Print rapid & rough
- Sketch over prints, crop, note
- Make pretty
Today’s special

Rapid play-acting and photobarding
Part IV | using storyboards

Discussing concepts

- On loose pages
- Preread by team members
- Plenty of annotation space
- Keep on the table, or hang on the wall

Optional:
- Give questions on beforehand
- Ask solutions for ‘holes’
Project awareness

- Develop a central storyboard, to keep a diverse team aimed in the same direction.
- E.g. cactus poster: a storyline with research questions from humanities perspective and technology perspective added to it.

Walkthrough with users

- A flipbook with users, stepping through the story and with questions/interview along the way.
Analysis & conceptualization

- In making a storyboard, you are forced to attend to the diverse questions, integrate them, and confront the implications that you could postpone with abstract considerations. (just as sketches force designers to "face form")

- Still you can leave out ingredients on purpose (just as sketches may be vague on points)

Making storyboards with users
And finally, ...  
... for making a movie of your concept

- The cinema-type storyboard
- Note: great to experience when playing, but no overview afterward...
Part V | using tools

- Mannikins
- Cameras
- Image manipulation: Photoshop
- 3D software
- Dedicated storyboard software

Software tools

- For cinema or comics
- Limited content for stories
- Limited expressiveness
- Help production, not conceptualization (!)

Examples
A storyboard tool (Patrick Snels)

- Research
- Paper version
- Software version
A storyboard tool | research

- Limited number of character poses
- Facial expressions important
- Props and characters
- Repetitive actions

A storyboard tool | paper version

- Composition and elements
A storyboard tool | software version

- Composition and elements
- Interaction (vs distraction)