

LADDER: MEANING OF HEALTH AND WELLNESS

mare
Marketing, Analysis & Research Expert

Capability

Feeling healthy is not being healthy. Currently, Ujang seeks *feeling* healthy (rather than being healthy), since that enables him to perform well/better. Feeling healthy (= enough condition to have endurance to work and not to be out of breath after running, not having headaches or a bad appearance) makes him capable of doing what he wants to do/achieve. *Being* healthy is important in the long haul.

Relief

With either physical effort, but achieve relief from creation. Every one have obligations world (where he thus making his

Take care of body and mind

When the pressure is tired, he needs to body and mind. trying to sleep is normal, but (machines), play



KNOWLEDGE BASKET

MULTIPLE ENCOUNTERS

WORKSESSIONS

LADDERING

ANALYSIS

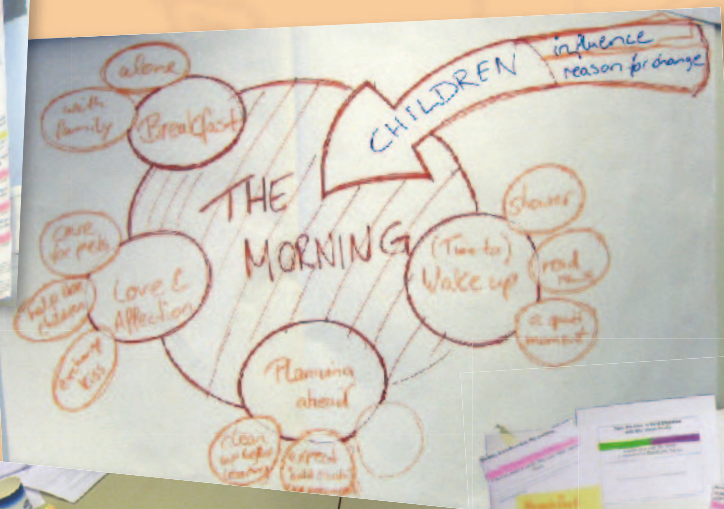
making sense of people



Our own data and message

4.1 family morning rituals

4.2 from data to message



author(s)

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title

Data!

intro

To base the visualizations on real data from user research, we drew on two datasets which had been done in earlier projects at Philips Design and TU Delft. We decided to take as raw data as possible, because ideas for visualization often arise during the interpretation process. On the other hand, the data should be sufficiently public, so we could use our visualizations in a brochure such as this one.

body text

Getting data for a research project is always difficult, especially if you want to be able to show the results later. Several factors stand in the way of using real data, especially interpretations and pictures. Interpretations are company confidential, privacy rules stand in the way of using the pictures or names of participants in the study.

The main data in this project came from a series of interviews about morning rituals from a previous research project. IDE student Meta de Best interviewed four couples, two with children, two without children, to explore the form and variability of family's morning rituals. The study addressed actions such as taking a shower, setting the table, taking care of the kids, reading the newspaper, planning the day, etc. And especially they discussed whether they conducted these rituals always in the same order and intensity, or whether this changed, e.g. between weekdays and weekend, between summer and winter, between run-of-the-mill days and special events...



4.1a



4.1b

I hate it when
you bring the hamster
into our bed in the
morning

4.1c



During a visit to the home of each of the four couples, a probe was handed over. The probe contained a two-week diary, a fun tear-off calendar and a big envelope containing a weekend assignment.

The diary was designed for two people (or more, in one case). The couples were asked to write down their morning routine on a timeline.

The calendar was more for the couples to get into the project. It was not used for data.

The envelope contained four different layouts of houses, from which the couple had to pick one that resembled their house most. Next assignments included filling in the layout with furniture, marking the morning routine route and placing text balloon stickers on the place of an activity.

After the two-week period, I came over for the final assignment.

This assignment was in the form of a board game in which the couple had to visualise their morning routine together. Using cards that displayed little scenes of everyday things, they had to go from the bed to the door that were displayed on the board. Finally, six red 'chance' cards were introduced to see if a random accident or happening would change their routines.

This was all recored on video and in photos. Each session was then made into a transcript (in Dutch).

A detailed layout of the cards was made to complement the text.

After all the visits, I had four sets of dairies, layouts of their houses, videos, transcripts and digital pictures.

These formed the basic dataset for the analysis, and the developed visualizations.

author(s)

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How analyzed

intro

A rapid and loose qualitative analysis workshop was performed on the user data. Prior to this workshop, all students studied parts of the user data, especially the transcripts of the interviews, and prepared key insights in the form of statement cards. During the workshop, these were discussed, grouped and labeled, in order to extract storytelling carriers: events, personas, and situations that formed the basis for the development of the visualizations.

body text

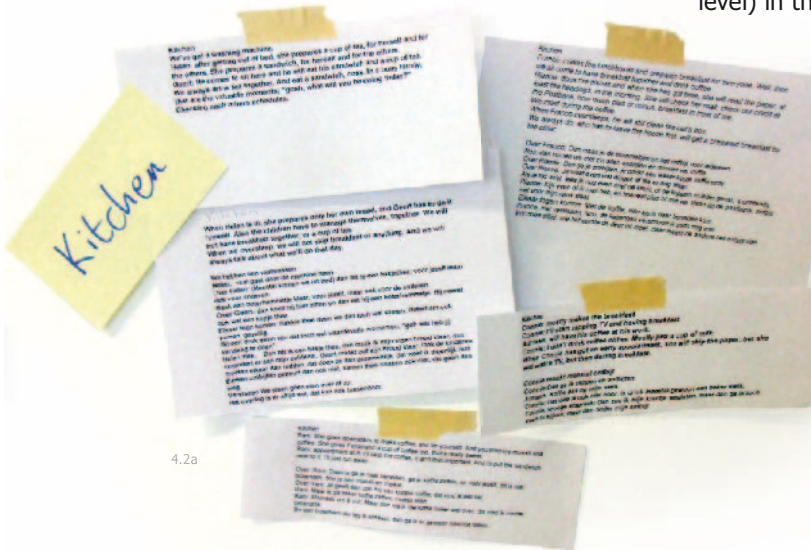
Determining what the message is, is not trivial. User-centered data as it arises in contextmapping is multi-layered, and multi-faceted. And there is a lot of it, so some form of reduction is needed. We decided to do the analysis with the group, and move fluently into visualization.

First, the group read the transcripts and studied the posters made by the participants (data level). Using the 'statement card' technique (see, e.g., Stappers & Sleeswijk Visser, 2007), interpretations were made (information level) in the form of paraphrase-quote

combinations, which were

then related, categorized, and further organized (knowledge level). Along such this process, we noticed that this ends up in abstractions, lists of short words, which lose touch with the original data.

Therefore the abstraction phase was followed by a renewed searching the data for quotes that exemplified the generalizations. After



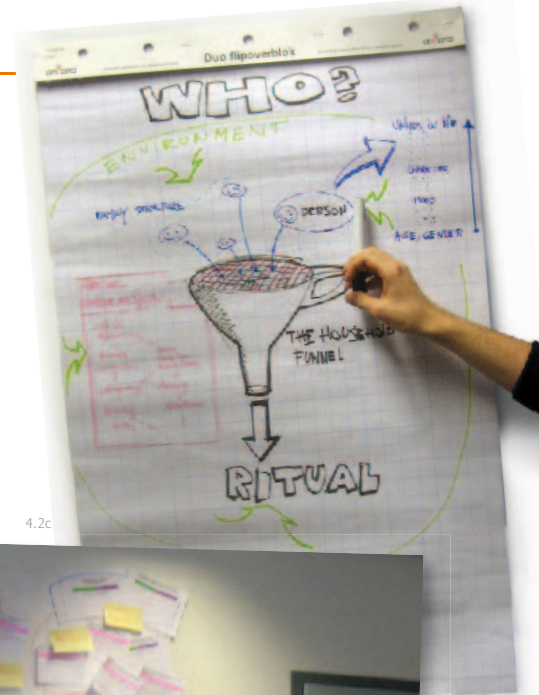
4.2a

4.2a - quotes selected from interview transcripts

4.2b - categorizing the quotes with statement cards

4.2c - summarizing and diagramming the conclusions

a few of these iterations, a number of mindmaps and infographics were made, which covered most of what we wanted to convey. These served as a map in which to plot the Visualizations. Events, storylines, situations, places, and persona's were constructed, compared, and iterated to produce two sets of final visualizations.



4.2c



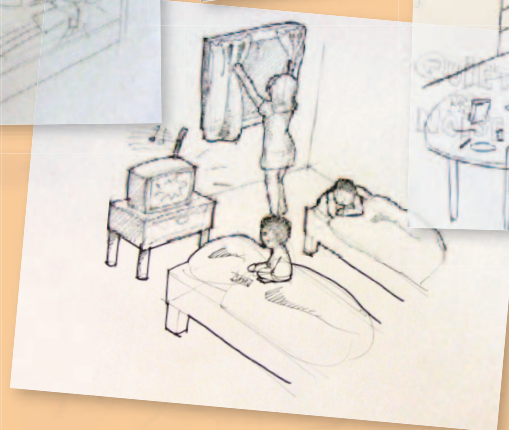
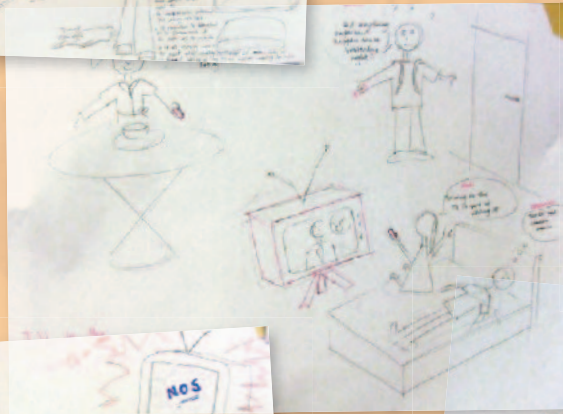
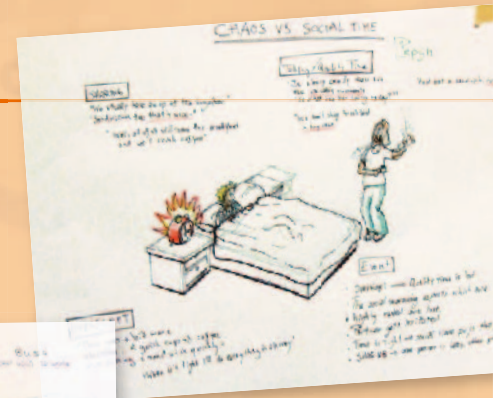
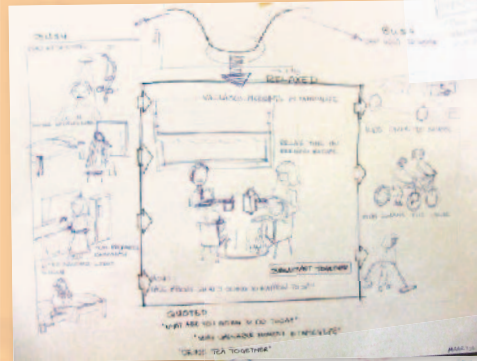
4.2b



Developing

5 PROCESS

- 5.1 *how developed - first run*
- 5.2 *developing on*
- 5.3 *deciding and finishing*
- 5.4 *tuning*



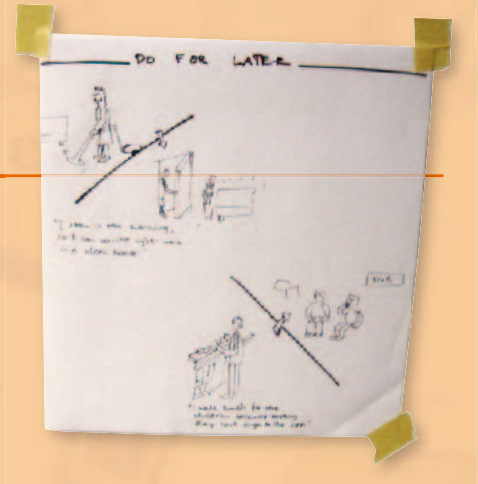
.... The Viz

6 THE VISUALIZATIONS

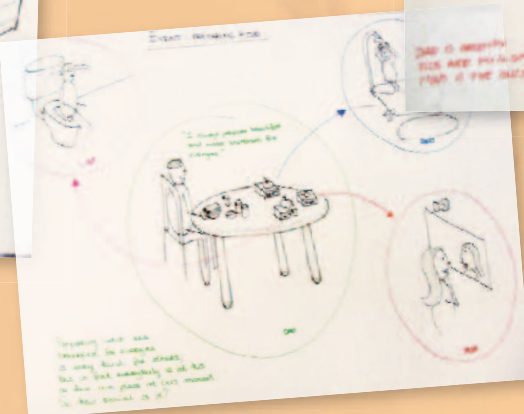
- 6.1 *sensitizers*
- 6.2 *the storyboard*
- 6.3 *the documentary*
- 6.4 *the house*

7 THE SESSION

- 7.1 *session A (storyboard and house)*
- 7.2 *session B (documentary and cards)*



The analysis moved into visualization, during which the findings were refined further, gaps were filled in, and expressive forms were tried out. This was done iteratively. First groups of students took different approaches, which were compared. Then, the different approaches were merged into a set of communication tools.



title

Events in space: the 3D storyboard

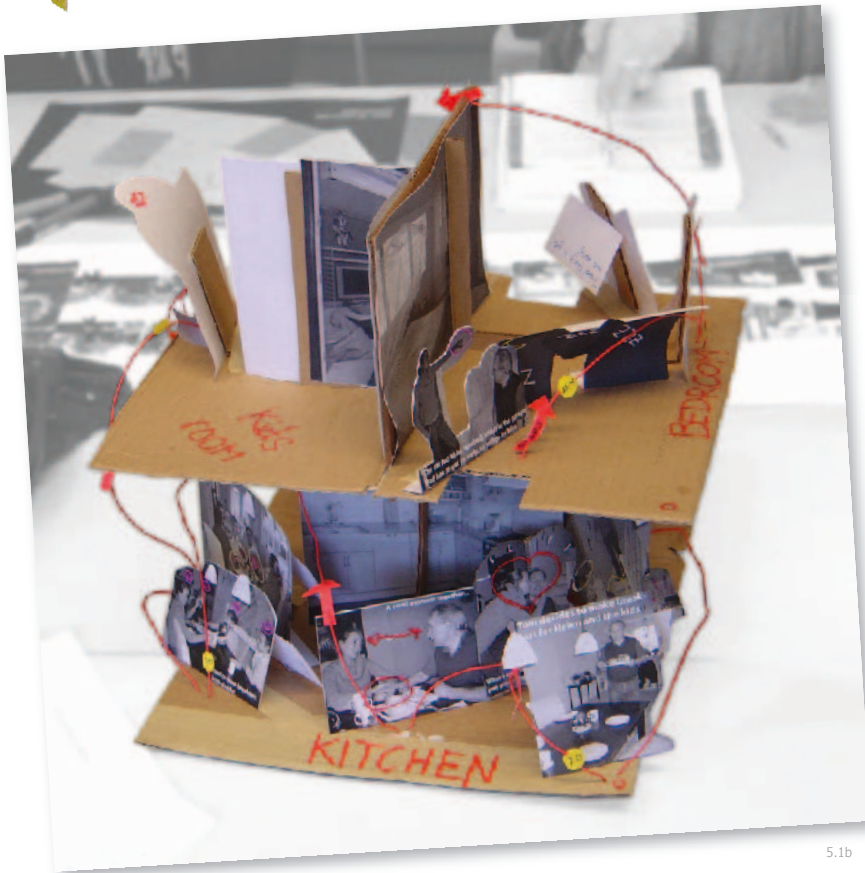
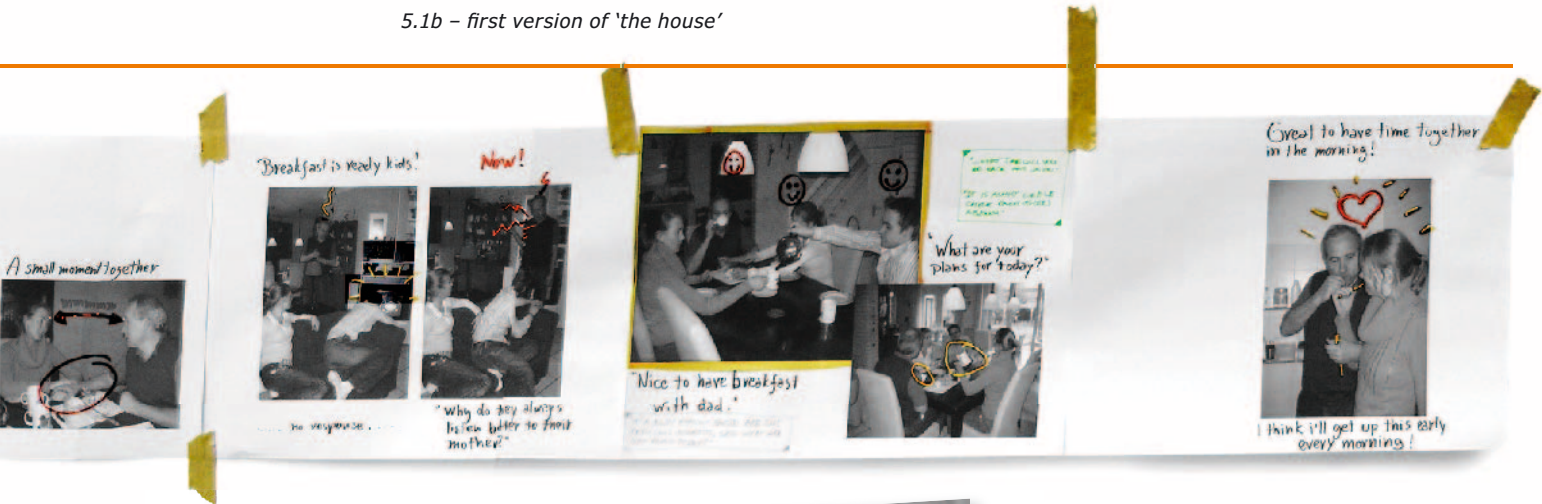


How to make a storyboard which shows where everything is happening simultaneously in space and over time? This was our approach to the challenge of designing the rich visualizations for the Philips workshop.

We decided what theme our storyboard should contain. We decided on: "giving a positive twist to what at first seems a negative experience in the morning ritual".

Besides the storyline we wanted to include a sense of space to the storyboard so you would know where the storyboard takes place. In the first phase we made a photo-storyboard, to which we added a few prints of what the house and some of its rooms looked like.

5.1a



The problem we then faced was that it was difficult to see the sequence of the different actions, therefore we added a timeline to the storyboard represented by a red wire twisting through the house. If you followed it you would see the actions in chronological order.

As rich visualization to give to the designers of Philips we improved the house as can be read in the section 6.3 'the house'.



5.2a

Steven? Are you awake yet?
-
Of course I'm awake... because
of my annoying, noisy little
brother!

[Claire and Steven]

illustrations

5.2a – A social interaction moment

5.2b – Initial sketches of the Andrews family: Donald, Claire, Steven and Mark

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title

Actions by people: The Andrews Family

intro

The final point in analysing the data was the translation of several key factors in the morning rituals, to sketches of situations that would provide a suitable basis for creating a fleshed-out storyline. Some of these centered around organising parents and task division, and these were combined to lay the basis for the Andrews family.

body text

The process of developing the visualisation consisted of three phases. First, to create a set-up for the storyline, with basic personas. The form of presentation was not of great importance here. Secondly, to create a draft version of the final product, with more developed personas and a more finished look, but with fewer details. Third, there was a process of detailing, and combining with another storyline, creating the definitive visualisation.

Initially, the personas were created (both physical characteristics and personality traits) and a

storyline for the morning ritual was written. The personas were the Andrews family, which consisted of parents Donald and Claire, rebellious adolescent Steve, and childish, noisy Mark. Defining the look of the characters was of great importance, this gave everyone in the group a springboard and made the characters come to life. The setup was presented in the form of a handdrawn storyboard in a cartoony style.

For the draft, the story was simplified into a more cohesive whole, with a focus on social interaction at the breakfast table.

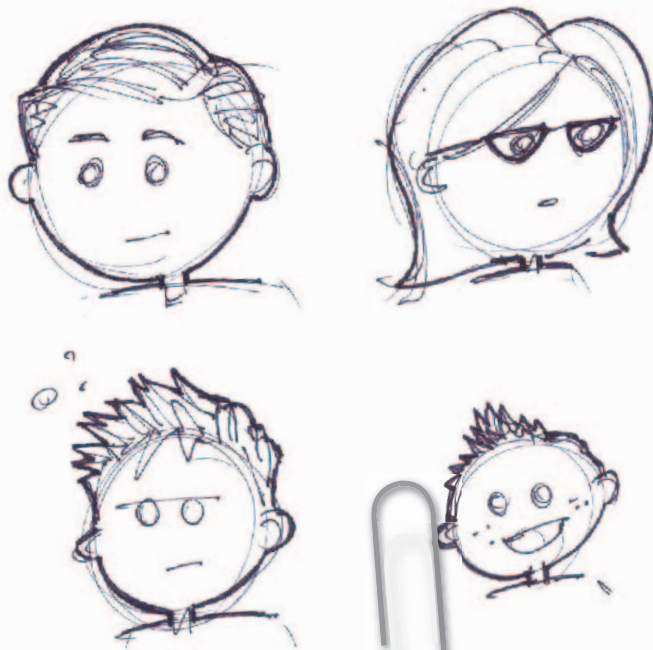
The drawing style became slightly less iconised to set the perspective of the viewer to observer rather than partaker.

The story was presented in the form of a movie, with a rough, sketchy quality.

A movie was chosen as this was viewed as a very immediate way of letting the designers immerse themselves in the story.

Finally, in the final phase, storylines were combined and further detailed. The final version is described in section 6.3 'the documentary'.

5.2b



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title

Privacy cards...

intro

We designed a set of cards that explained insights in the form of small stories about a family. Our starting point of constituting 'events' was the theme "privacy and conflict" of a family in the morning.

5.3a

body text

At first, we gathered events from the data that are typical for the morning rituals. To combine and relate these events, we built up personas, so the characteristics of family members make the story vivid and empathic.



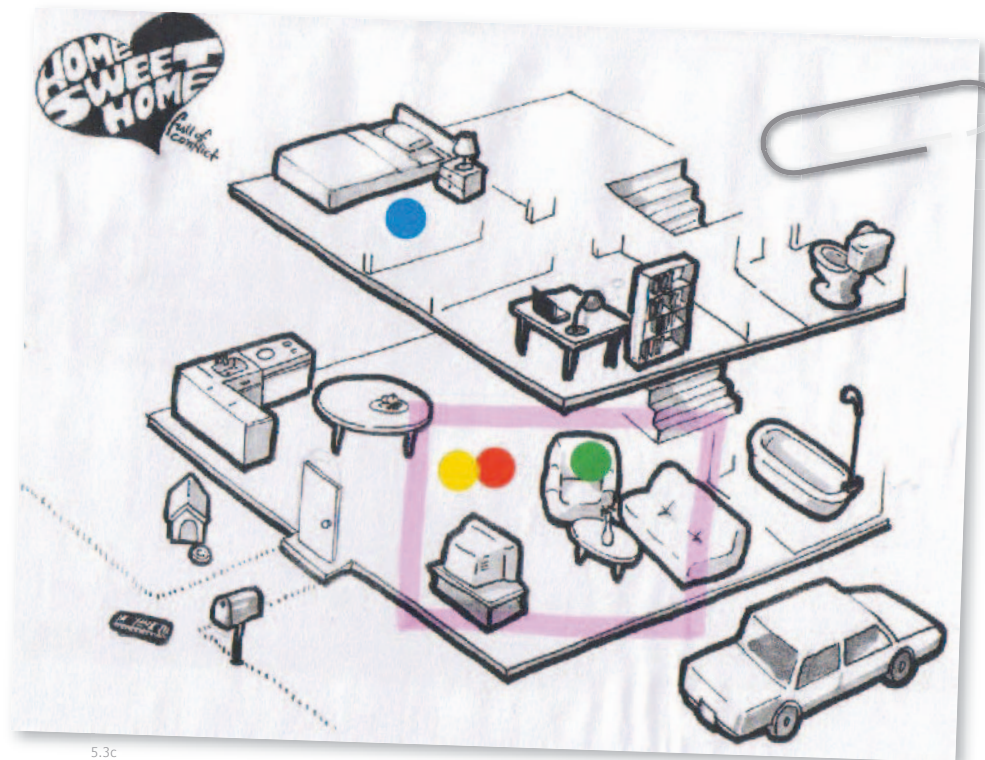
5.3b

We extracted 7 events from the list and assigned them to the morning timeline. The events were detailed to form a single storyline fitting the personas' characters.

We then constructed one big panel which had 7 events on the timeline; each of the events was illustrated by vivid, realistic drawings. Instead of drawing the faces of family members, some abstract shapes in coloured paper were cut out. Each colour corresponded with one member of the family. During the following RichViz meeting the effect of omitting facial expression was discussed.

Through comparison it was concluded that leaving the faces blank seemed to stimulate empathy and imagination.

For rich visualisations to communicate to designers, we decided to further develop the event cards. The drawings placed on the cover illustrated a certain event; inside the card was a map presenting the lively story and the location of the other family members at that moment. The family members were depicted by using the same colour code as for the faces. This technique enabled the reader to get a feeling for the family members' favourite areas, for example the father and his armchair.



5.3c

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title

The development of the personas and storyboard of Tom and Anne



5.4a

intro

Merging original data into useful design inspiration visuals is a complex process. It is necessary to recognize patterns in order to capture the essence of the data. On the other hand, a realistic level of detail and some clashes should be added so that the story will be inspiring to the designers.

body text

The creation of the personas and storyboard was structured around a couple, one of whom is very organized, the other a more laid back person. First, two rough personas were created; the organized mum Anne and laid back dad Tom. The first visualizations of these personas showed the diaries of both Tom and Anne, illustrated with pictures. Parallel a storyboard for Anne was made in a quick and dirty collaging style. After a group discussion it was decided that the pictures from the personas were not realistic and that the text was too long. For the storyboard it was decided that it also needed to show Tom's view and that the contrast between the different layers of the collaging technique in the storyboard was not big enough. The faces drawn on to the picture of the character seem to work well for creating empathy.

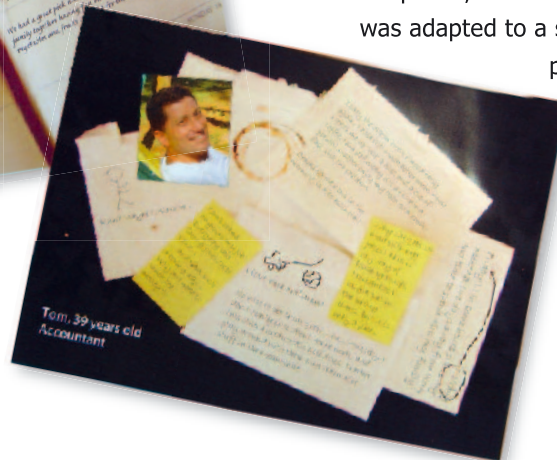
In the next phase, the text in the personas was shortened and the visual was adapted to a style that represented the personality of the

persona. Anne's persona showed her neat and organized diary, whereas Tom's showed loose and unorganized post-its. To make more contrast between different layers, the storyboard was made with different visual material; black- and-white and colored pictures of the environment, realistic pictures of children and black outlined pictures of the main character. Furthermore, the storyboard represented two storylines

The persona's visual image can reflect his or her identity



5.4b





5.4c

A story can consist of several storylines, each centered around one main character

and clashes in the morning ritual were accentuated by twisting the frame slightly. The final adjustments to the storyboard were making a black frame around the pictures from the two storylines showing social interactions and accentuating clashes in the morning ritual with a red frame.

refs Grudin, J., & Pruitt, J. (2002). Personas, participatory design and product development: An infrastructure for engagement. *Participatory Design Conference*, Palo Alto.

Pruitt, J., & Grudin, J.(2003). Personas: practice and theory. Conference on Designing for User Experiences, San Francisco, USA.

Tierno, M. (2002) *Aristotle's Poetics for screenwriters*. Hyperion, New York

illustrations

5.1a – initial version of "Anne's diary"

5.1b – final diaries of Tom and Anne

5.1c – the first storyboard, showing Anne's face in abstracted style

5.1d – the second storyboard carried two parallel storylines

5.1e – in the final storyboard, connections between the storylines are made explicit



5.4d



5.4e

author(s) title

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Sensitizing for participatory communication...

intro

In the run up to the workshop, the Philips design team received a steady trickle of teasers, to sensitize them toward the user data. The two teams received different sensitizers which connected to the different workshop materials.

Team A made coffee mugs, each one representing a different persona. Also three "advent calendar walls" were made for the coffee corner at Philips. Team B made several sensitizers, namely dolls with different T-shirts for every day, lunchboxes with triggering questions, and emails, sent to the design team members.



Team A

body text

The goal of the sensitizers was to make the participants aware of (and engaged with) the main topic 'morning rituals' of the workshop and to give a very short introduction to the personas that would be used in the session.

The coffee mugs were given one week before the session. On every mug there was a picture of the persona, a quote of this persona (from the original data) and a triggering question.

The two advent calendar walls were to be placed in the coffee corner. Each had a theme, expressed by a triggering question, e.g. "What irritates you in the mornings?". People could open small 'doors' to see general pictures behind them, which raised the anticipations of the team. Markers and post-its were provided for people to add their own reactions, reflections, or experiences.



6.1a



6.1b

6.1a – persona mugs for sensitizing

6.1b – advent event walls

6.1c – Mark and Steven with their T-shirts

6.1d – lunchboxes prepared for delivery



6.1c



I couldn't catch the
end of Scooby Doo.
Can you tell me how it
ended? Please tell me!

[Mark, in an e-mail to Team B]

Team B

Almost a week before the sessions the first sensitizers arrived at Philips. The other sensitizers were distributed in the succeeding days.

First, two dolls appeared. Silhouettes of two young boys, representing personas, were placed in the coffee corner with their clothing frames and wardrobes. The boys' wardrobes existed of T-shirts with slogans on them; these shirts were replaced several times during the week. The design team could be prepared in this way, because they already knew the opinions and views of the two personas.

Furthermore, the team got mail in their mailbox from StevenMark.Andrew@gmail.com three days in a row.

In those emails, the two boys introduced themselves and wrote in an informal way some of their insights. The emails were also set up to get to know the two boys a bit better on forehand of the session.

The last sensitizers were some lunchboxes. lunchboxes arrived at the desks of the designers. In those lunchboxes were, except for the biscuits, drinks and apples, some cards with messages meant for Mark or Steven and inspiring questions. The designers should, in this way, be inspired to think about their childhood again.



6.1d

author(s)

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title

Anne's and Tom's perspective on their morning ritual

intro

People can experience the same morning differently. Especially in a family situation differences in morning rituals can lead to small conflicts on a daily basis. A storyboard and two personas were made to show the different perspectives of two parents from the same household: Tom and Anne.

body text

Anne is an organized mum and Tom is a more laid back dad. These differences in character are visualized in their personas; Anne's persona shows a neat and organized agenda with notes about her life values and morning routine. Tom's persona shows loose post-its with quotes of his life values and morning rituals. Their portraits were added to make them come alive.

The storyboard showed the morning ritual from their two different perspectives. For their construction, theories from storytelling (section 3.3) were used; the two big pictures at the beginning and the end of the storyline indicate where the story happens and that both storylines happen at the same place and at the same time. This makes it possible to easily step back.

To provide for stepping in, the storyboard has many different layers.

Based on techniques mentioned in 'Understanding Comics' we chose to represent the different persons in each storyline in different ways; the adult main character e.g. has black outlines and a drawn expression to let the designer empathize with this person.

To make the storyboard realistic we collected pictures of the environment from a house selling website.



6.2a

When only one person is drawn in outline, or simplified in cartoon shape, we tend to indentify with that person

[first Rich Viz lecture]



6.2b

The first image sets the scene,
it shows the environment people
live in

[storytelling]



A combination of black-and-white and colour pictures was used to make the storyboard more readable. Furthermore all pictures of the house, objects and personas were superimposed with a 2.5 D collaging technique, to make the storyboard more engaging and to allow readers to switch easily between the different layers. Based on what we learnt from the storyboard workshop a short descriptive text beneath each frame made the events explicit.



6.2c

illustrations

6.2 a – the storyboard with the personas

*A black frame around the pictures from both storylines bounds the moments where Tom and Anne interact. To draw the designer's attention, a clash in the morning ritual is indicated by a red frame and by twisting the image slightly.
(see also 6.2d)*

6.2 b – Tom, the main character of this story line, has black outlines

6.2 c – the first picture of the storyboard sets the scene

6.2 d – detail of the storyboard showing the 2.5D collage technique

refs

McCloud, S. (1993) *Understanding Comics: The invisible art*.
Kitchen Sink Press

Tierno, M. (2002) *Aristotle's Poetics for screenwriters*. Hyperion,
New York

Schellhardt, L. (2003) *Screenwriting for dummies*. Wiley



6.2d

illustrations

6.3a – the first draft house

6.3b – similar pictures used from the storyboard; an impression

6.3c – the final house presented to the design team (with- and without the outside box)

When preparing breakfast
I am mostly alone, but
then we will eat it and
then we are together

[research data quote, posted in the house]



6.3c



author(s)

title

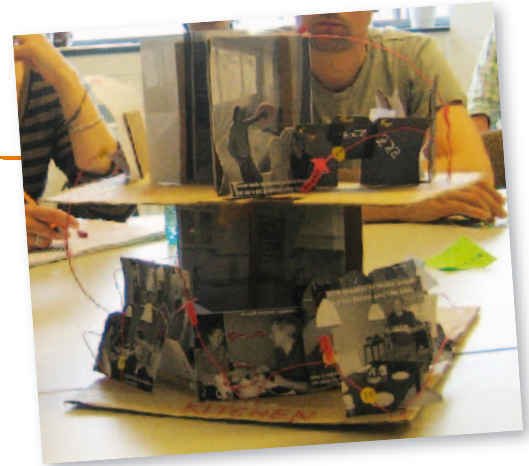
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The house: A 3D storyboard

intro

The story around the morning ritual of two personas, Anne and Tom, is captured in a storyboard. For adding an extra dimension, a 3D house was built, representing the living space, morning rituals and followed paths of the characters. The house provides an overview and makes the story come to life. It is designed as a stepping in and stepping out tool for the designers during the workshop.



6.3a

Body text

For the storyboard, as explained in Section 6.2, a story was contrived, based upon facts from the actual data, enriched where needed by our own experiences, regarding two personas Anne and Tom. A 3D version of this storyboard is designed, in the form of the house that Anne and Tom are living in. The house is a representation of the same story, with an extra dimension added. The house provides an overview of the living space of the personas and explains their rituals and the paths that they follow in the morning as well. A link with the real data was created by adding quotes. The house provided a stepping in and stepping back tool for the designers during the entire session. They could look at it over and over again and keep discovering new things; the house's spatial arrangement makes the story come to life. To stimulate curiosity in the beginning of the session, an outside for the house was created. This outside box, representing the actual house, includes small windows, through which the designers can peek inside, and which triggers them to explore the house further during the session. The special moments of the house and the storyboard are connected by colour-coding and by using a coherent style of pictures. The house is kept sketchy to make it easily accessible for the designers to work with and in order not to detract from the story of the personas.



6.3b

In a busy family these are the precious moments, "well what will you do today?"

[research data quote, posted in the house]

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title

The Andrews family documentary

intro

This documentary is used in the design workshop with the Philips Design team, to introduce them to the Andrews family and their morning rituals. By using a documentary as stepping-in tool, a more dynamic way of storytelling was provided.

The story of the morning ritual was drawn in comics style; subsequently, these pictures were filmed in sequence, while a voice-over tells the storyline, and gives in-depth information about feelings and values of the personas.

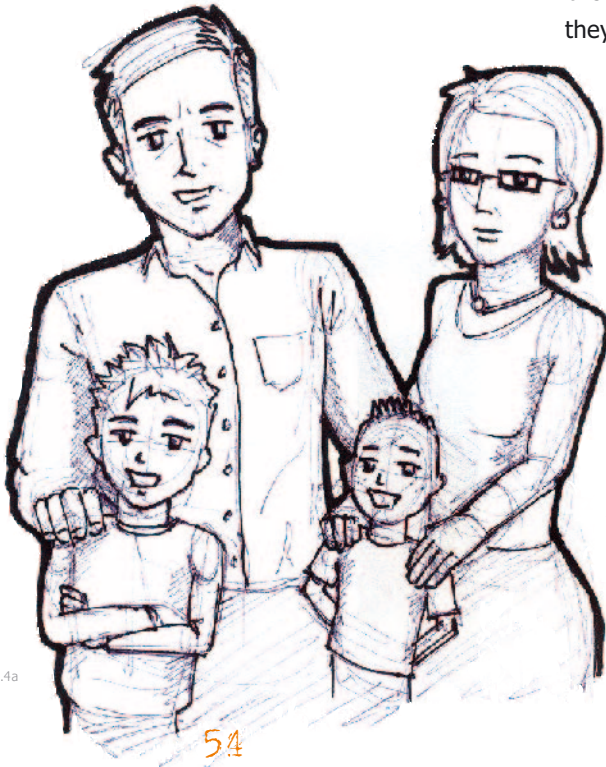
When Donald goes downstairs, he makes a cup of tea and a sandwich, for himself, and also for the others

body text

At the beginning of the workshop, the documentary was shown, to let the designers meet the Andrews family with their morning rituals and their feelings they have around the breakfast table.

Also the designers should know about the values of the different personas after seeing the documentary. Together with the documentary a piece of white paper with a small print of the house of the family was given to the designers. While watching the documentary, the designers could use this to make notes and mark where a situation takes place in the house. After seeing the documentary, the designers got cards with a precise description of the personas they can refer to during idea generation.

The story was drawn in several pictures in comic style, these pictures were filmed in sequence. While filming, a storyteller tells what happens with each picture and what the feelings of the personas involved are. This way the story of the morning ritual is told and simultaneously the personas are introduced with their values and meanings.

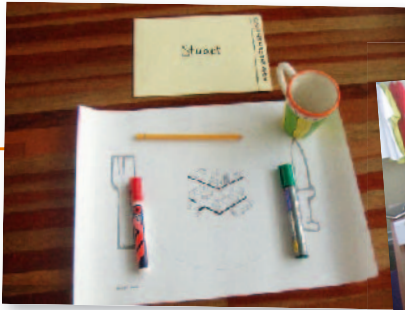


6.4a

54

6.4b





6.4c



When I am making
the lunchboxes
I'm usually sitting
alone, but when
eating breakfast
we sit together.
A cup of tea we
drink together, and
a sandwich, very
nice

By using sketchy, comic style pictures, we meant to give the designers space to let them fill in situations with details they know from own experiences. We chose to show the story in a documentary form instead of an on-paper form, so it was less effort for the designers to get into the morning ritual of the family and to make the story come more alive.

illustrations

6.4a – the Andrews family

6.4b – watching the documentary

6.4c – the persona tools for in the session

6.4d – stills from the documentary

refs

McCloud, S.,(1993) *Understanding Comics: The Invisible Art*, Kitchen Sink Press

Raijmakers, B., *Documentary workshop*, this course

6.4d



author(s)

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title

Sessions at Philips A: Storyboard

intro

The materials were used in a four hour design workshop, in which design team used the visuals just described as inspiration sources, and gave feedback on how well the visuals served their needs in designing for a special situation. The workshop was organized through the question of 'enhancing social interaction around the breakfast table'. Two teams, A and B, worked separately.

body text

Team A was made up of six designers and design researchers. After an introduction of the problem, they briefly discussed their experiences with the sensitizers. With the introduction of the storyboard and the personas, the team began to dive

into the context. The team was very good at empathizing with the persons depicted in the storyboard. During their first reading they frequently commented on the content, referring to the personas by name. After 15 minutes of analysis, the cardboard house was introduced.

The team was fascinated by the house, and eagerly did the assignment, quickly placing the quotes in the proper places of the house. Having explored the materials, they then split into two groups, each working separately on one of the storylines. During idea generation, they put the materials aside and hardly returned to them.

At the end of the session they presented concepts for interactive breakfast tableware that prompts its users toward interactions.



7.1a



7.1c



7.1a

We really got into the routines but stacked with the problem. There is a tension but everything is going on. If mama broke her leg what would happen? Who would feel what?

...while Anne was
preparing the breakfast,
Tom was having his
extensive shower...
"Lucky person!"

[Ilse van den Hurk, team A]

7.1d



The team's feedback on the RichViz materials helped greatly in evaluating our design choices.

The team was mostly content with the materials. The storyboard was said to help them to 'get into' the routines. The way photographs were used in the storyboard and the persona representations, helped create empathy.

The design team quickly became familiar with the patterns and spaces via the house model. This was said to be detailed to a desired degree, and they explained that they did not refer back to it during the session, because it had been 'with them' in their minds, not because it lacked interest. In general, though, they missed a level of concrete detail in the visualisations of storyboard and personas. Being drawn, these were still too much interpretations, too little 'raw data, which always contains many small and inspiring details'. The team had wanted more details about the personalities of the personas, the children themselves and some real tension in the story. Regarding the house, they would have wanted to hear the voices of the people in the house. And most importantly, they found the materials too rich and unambiguous for such the design task, which gave them difficulties in elaborating the problem.

7.1e



illustrations

7.1a – the problem with the sensitizer

7.1b – team reading the storyboard

7.1c – introduction of the house to the team

7.1d – team generating ideas

7.1e – placing the quotes to the house

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Sessions at Philips B: Documentary



7.2a

What was it
about again?

[John, while looking at the cards]

intro

Design team B was provided with a documentary, a card-set and a 3D-map of the house as inspirational material for designing a new product concept for the breakfast table.

body text

The documentary was shown once, in a 5 minute presentation. The team then split up into two groups (each 3 to 4 people), which worked separately. The first group hardly ever used the map and analysed all perspectives by using post-its, whereas the second group was talking about morning rituals in general, their own experiences and analysed the documentary by use of the map. Both groups used the cards in a later stage of the process and these were shared between the two groups. The cards were mostly used when the designers got stuck, wanted more information or to find back information that had been forgotten.

The second group started using post-its on a map and drawing ideas halfway the process. By the time they got back together, reuniting the groups was difficult, as their ideas had diverged greatly. Both presented their ideas, but these were developed from different perspectives (one group chose the dad's, the other a son's perspective).



7.2b



- 7.2a - Discussing morning rituals in general with the map as a reference tool
- 7.2b - Analysing the different perspectives using post-its
- 7.2c - Using the cards when they can't think of anymore information about the different perspectives

Get rid of routine

[Daniel, on post-its]

The cards were used, but these didn't give them much grip. The group hesitated to make choices.

One person from each group took up the challenge to combine the ideas and divide tasks. In the last 5 minutes they sketched everything very quickly and presented their ideas.

A comment of the Philips designers on the documentary form was, that by using the sketchy comic style, they thought the information was too much filtered, they missed the information that would trigger them. For example more information about the environment and details. They had the feeling they had to rely too much on personal knowledge. This means the pictures

were too much simplified, the level of iconicity did not match the needs of the designers. Next time the pictures should be more based on real breakfast table situations, with all stuff standing on the table.

7.2c

