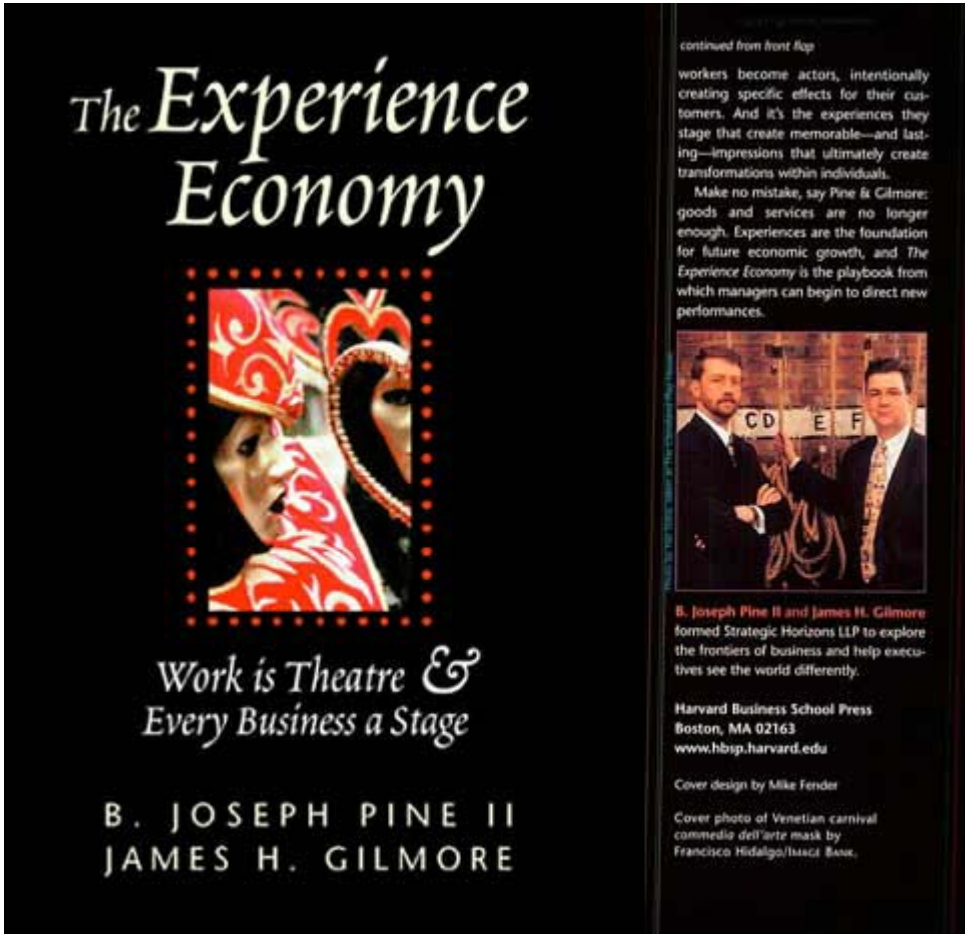
Designing the consumer experience

Rick (H.N.J.) Schifferstein

Pine & Gilmore (1999)




NOKIA
Connecting People


SENSORY MARKETING
edited by Aradhna Krishna
EXPERIENTIAL MARKETING
HOW TO GET CUSTOMERS TO SENSE • FEEL • THINK • ACT • RELATE TO YOUR COMPANY AND BRANDS
BERND H. SCHMITT
Albert Boswijk
Thomas Thijssen
Ed Peelen
EEN NIEUWE KIJK OP DE EXPERIENCE ECONOMY
BELEVENISSEN VAN BETEKENIS
SENSORY MARKETING
Product Experience
Martin Lindstrom
BRAND Sense
How to build powerful brands through touch, taste, smell, sight & sound
SENSORY MARKETING
BERTIL HULTÉN
KLAS BROWEUS
MARCUS VAN DIJK
norden
Dance or Die
Dollars and Sense: The Impact of Multi-Sensory Marketing

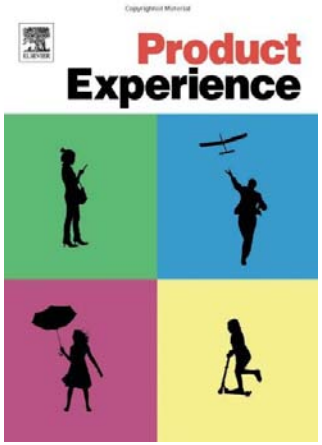

What is an experience?

Framework of Product Experience

Hekkert & Schifferstein, 2008

Definition:
The awareness of the psychological effects elicited by the interaction with a product, including the degree to which

- all our senses are stimulated
- the meanings and values we attach to the product
- the feelings and emotions that are elicited



Framework of Product Experience

Schifferstein, Food Quality and Preference, 2010

	Product focus	Human focus
Low in affect	Perception	Meaning
High in affect	Aesthetics	Emotion

Perception in Product Experience

Schifferstein & Cleiren, 2005; Schifferstein & Desmet, 2007

- Each sensory modality receives different inputs
  - Vision: large role in functional interaction; direct links to stored knowledge; attracts attention
  - Touch: substantial role in functional interaction; important for emotional bond
  - Audition: major role in communication
  - Smell and taste: functional role for foods, but not for many appliances; emotional reactions to products
- Stimulation of multiple modalities yields richer experiences (Multi-Sensory Design)

Aesthetics in Product Experience

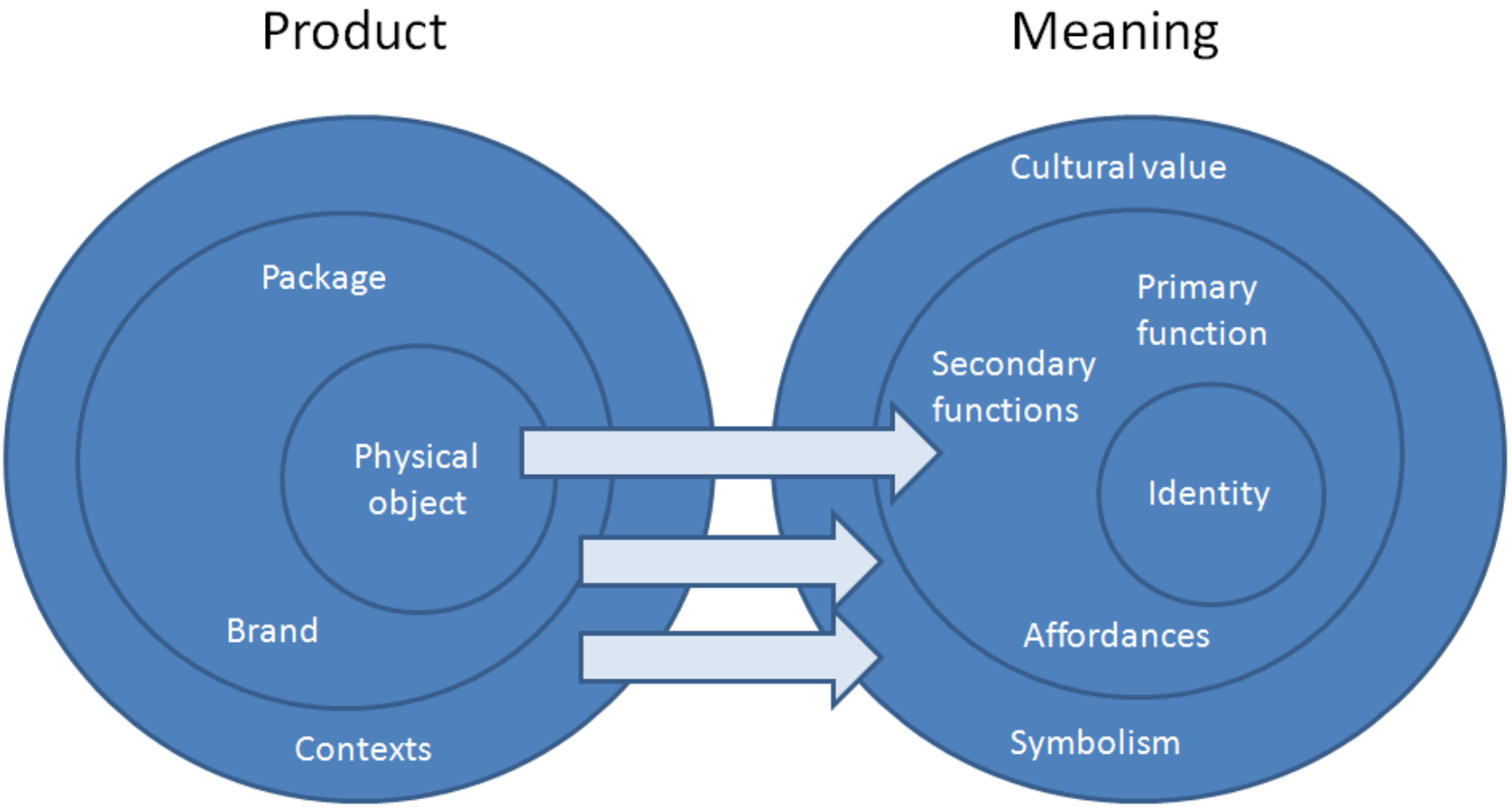
Schifferstein & Hekkert in Art & the Senses (2011)

Aesthetic = gratification of the senses; sensuous delight

Aesthetic principles may be universal or modality-specific

Structural stimulus properties	Meaningful properties
Contrast	Familiarity
Similarity	Novelty
Balance	Challenge
Complexity	

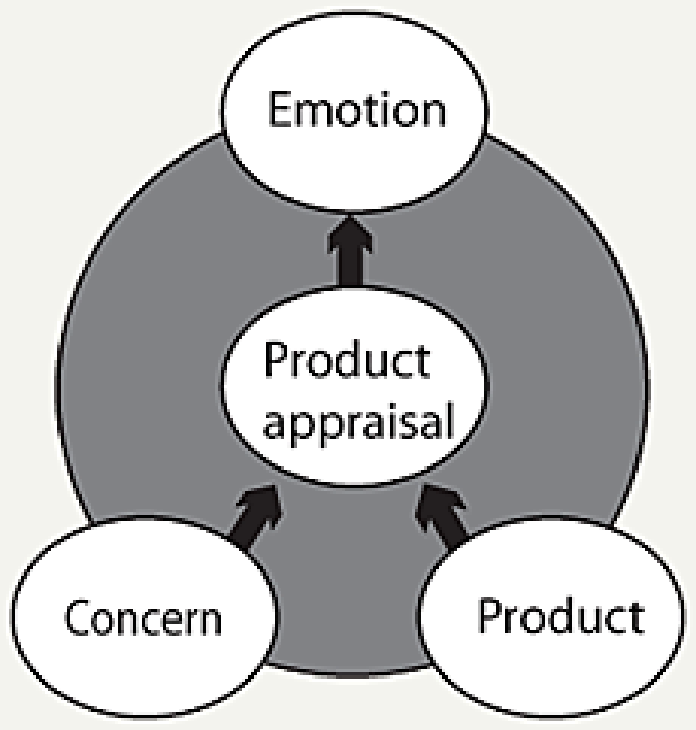
Meaning in Product Experience



Emotions in Product Experience

Desmet, 2003

- Emotional responses to products differ between individuals
- Not the event (product) itself, but the *meaning* the individual attaches to the event determines the emotion



Framework of Product Experience

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	Product focus	Human focus
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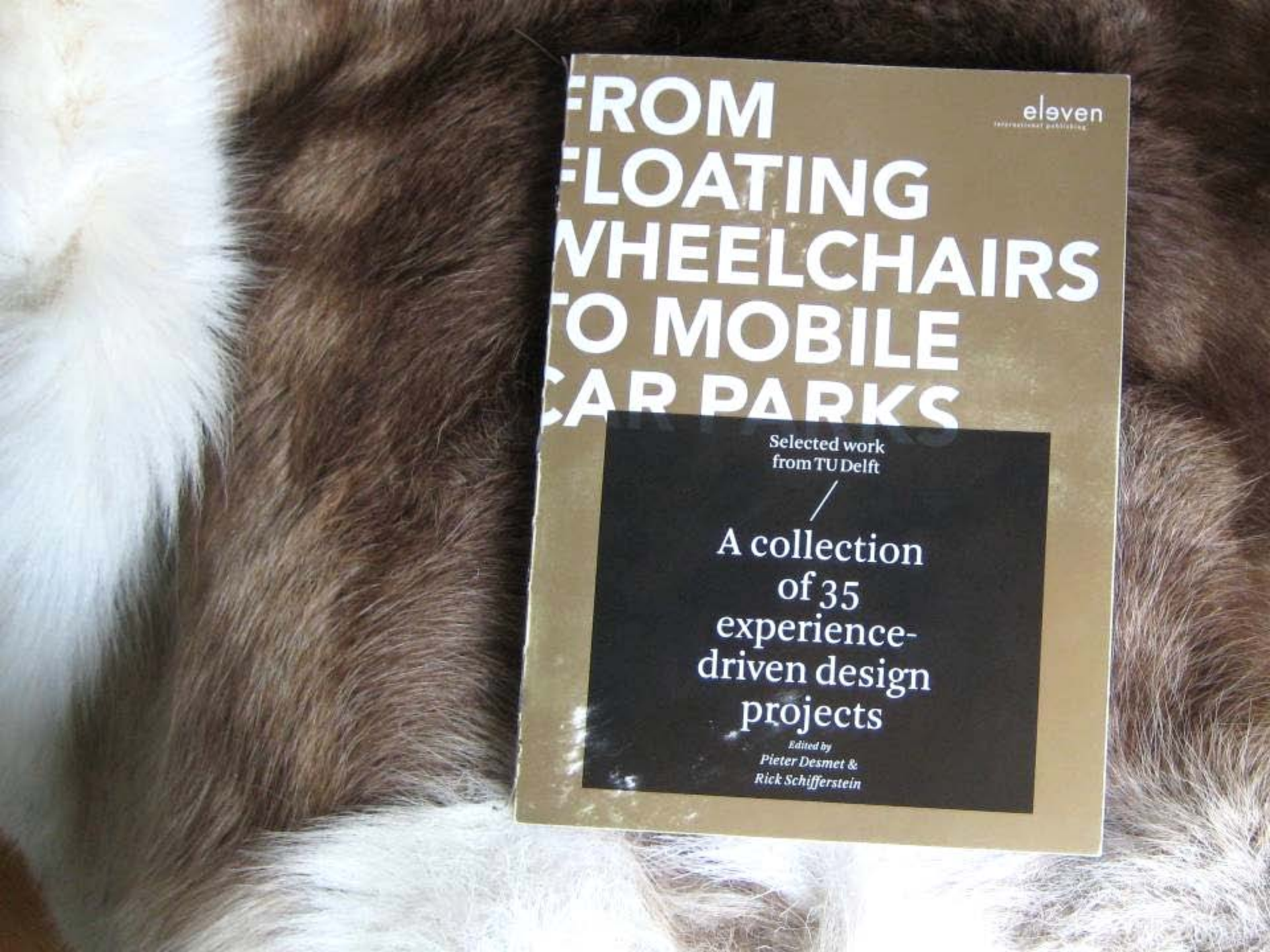
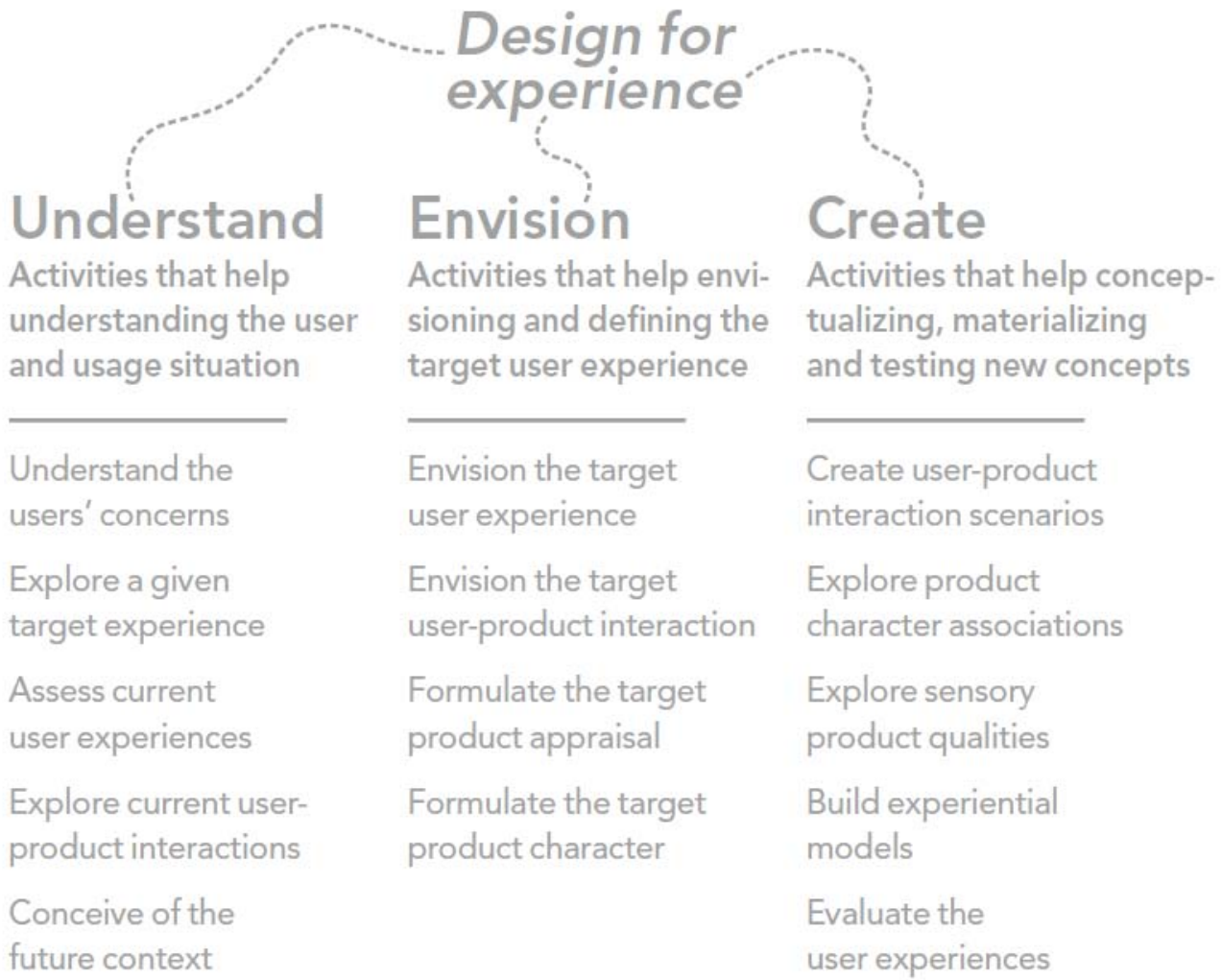
Measuring Product Experiences

How to measure perception, aesthetics, meaning, emotion?

- Studies that focus on one aspect do not present complete story
- Experience aspects are inter-dependent
- We cannot measure all experience aspects through a single type of approach
  - E.g., questionnaire research requires verbalization and is limited to measuring meanings

How to design an experience?


FROM
FLOATING
WHEELCHAIRS
TO MOBILE
CAR PARKS
eleven
Selected work
from TU Delft
A collection
of 35
experience-
driven design
projects
Edited by
Pieter Desmet &
Rick Schifferstein


Design for experience
Understand
Activities that help understanding the user and usage situation
Understand the users' concerns
Explore a given target experience
Assess current user experiences
Explore current user-product interactions
Conceive of the future context
Envision
Activities that help envisioning and defining the target user experience
Envision the target user experience
Envision the target user-product interaction
Formulate the target product appraisal
Formulate the target product character
Create
Activities that help conceptualizing, materializing and testing new concepts
Create user-product interaction scenarios
Explore product character associations
Explore sensory product qualities
Build experiential models
Evaluate the user experiences

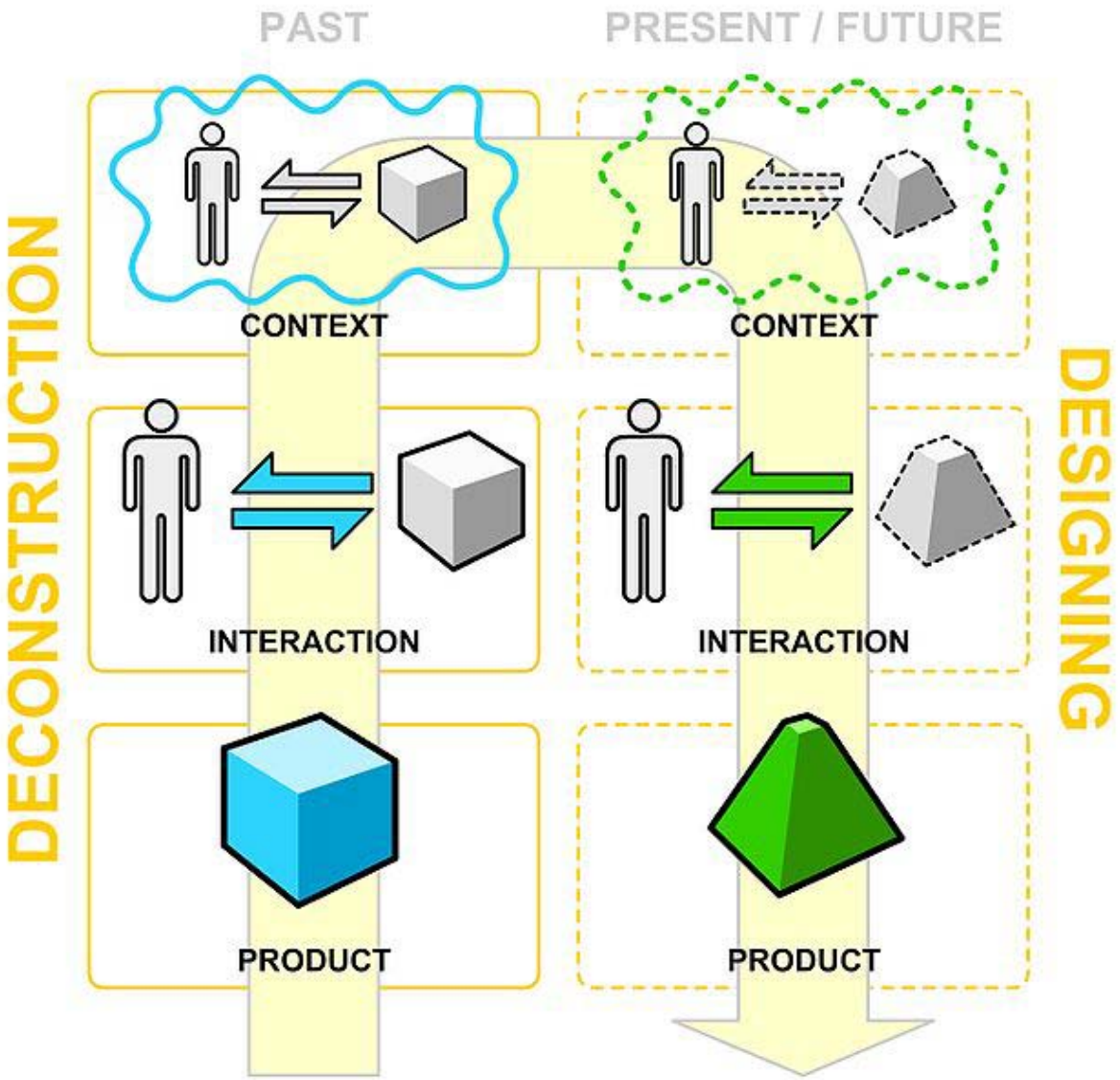

Vision in Design
A Guidebook
for Innovators
Vision in Design
A Guidebook
for Innovators
Paul Hekkert
Matthijs van Dijk
ViP
BIS

ViP

Hekkert & van Dijk (2011)

- Products obtain meaning through interactions with people, in relationships with people.
- The context determines the appropriateness of any interaction.
- Explore background of problem: What are the user needs that underlie the problem?
- Define vision of what you want to achieve and want to create. Determine reason for existence.
- Designer should look for possibilities and possible futures, instead of trying to solve day-to-day problems.

ViP


PAST
PRESENT / FUTURE
DECONSTRUCTION
DESIGNING
CONTEXT
CONTEXT
INTERACTION
INTERACTION
PRODUCT
PRODUCT

ViP

Hekkert & van Dijk (2011)

0. Deconstruction
1. Domain and time frame
2. Context factors:
States, principles, developments, and trends
3. Context structure
4. Design statement
What experience would you like to offer people, within the context?
5. Human-product interaction
How would you like to offer...
6. Product qualities
7. Concept
8. Final manifestation

Physical, Social, Cultural etc.

Experience

Personality, Expression

Materials, Shape, Components

ViP compared

ViP	Classical design approach
0. Deconstruction	1. Problem definition; program of demands
1. Domain and time frame	
2. Context factors	
3. Context structure	
4. Design statement	
5. Human-product interaction	
6. Product qualities	
7. Concept	2. Concept
8. Final manifestation	3. Final manifestation

Example: Office furnishing concept

Michelle Kriesels

Context:

At work, people have to cope with new information, insights, developments, expectations

Every person is different and has different needs

People like to develop themselves; they are curious and creative

Example: Office furnishing concept

Intended user experience:

Give office workers the confidence to trust their intuition and make choices unconsciously

So that:

- Diverse or new manners of communication and cooperation will arise
- They can discover and learn more during work

Example: Office furnishing concept

Interaction metaphor: The public garden

Enable intuitive behaviour: read a book, walk the dog, play on the grass, have a picnic

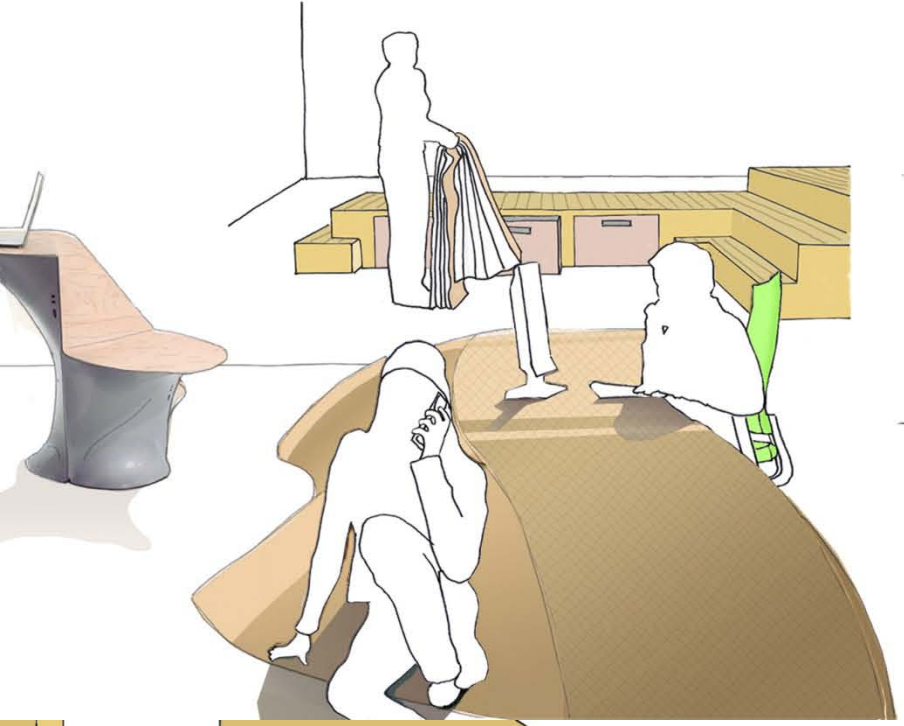
Be amongst other people; have spontaneous and unexpected forms of contact

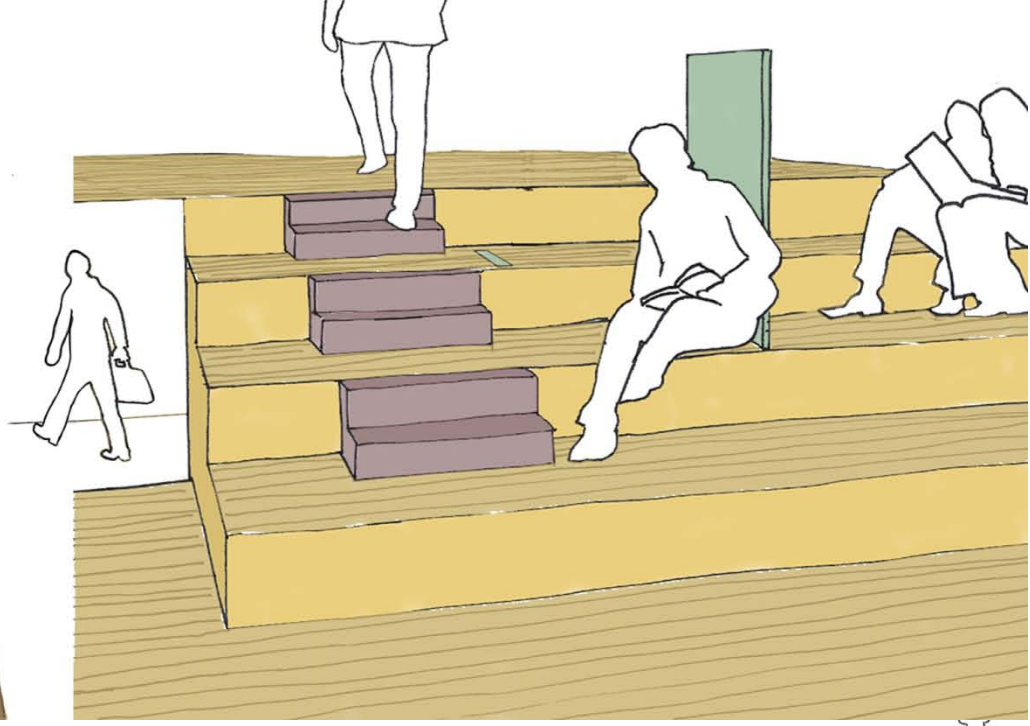
Be inspired by other activities

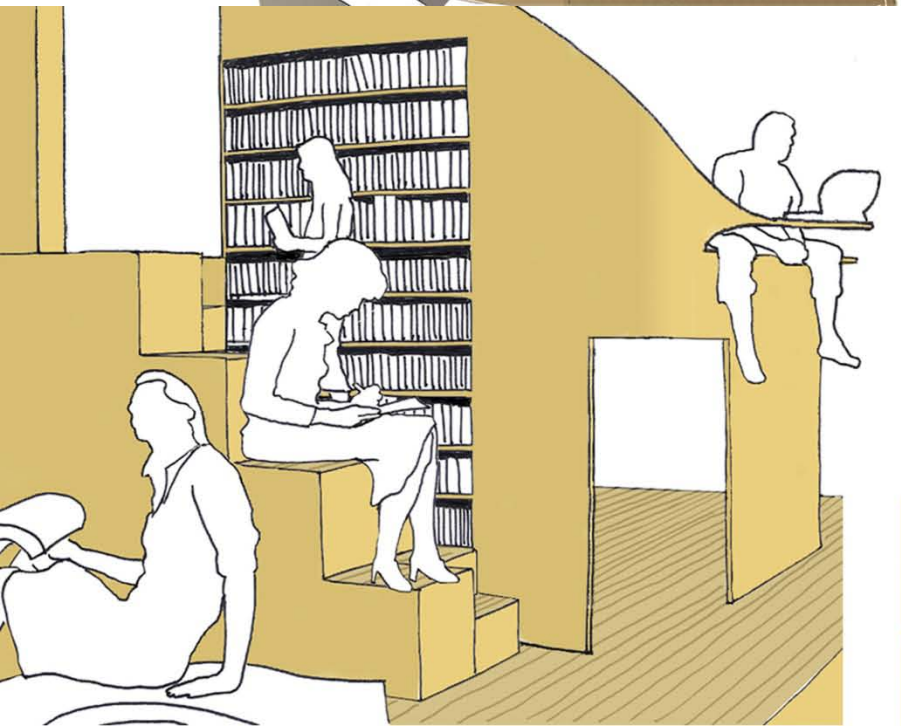
Example: Office furnishing concept

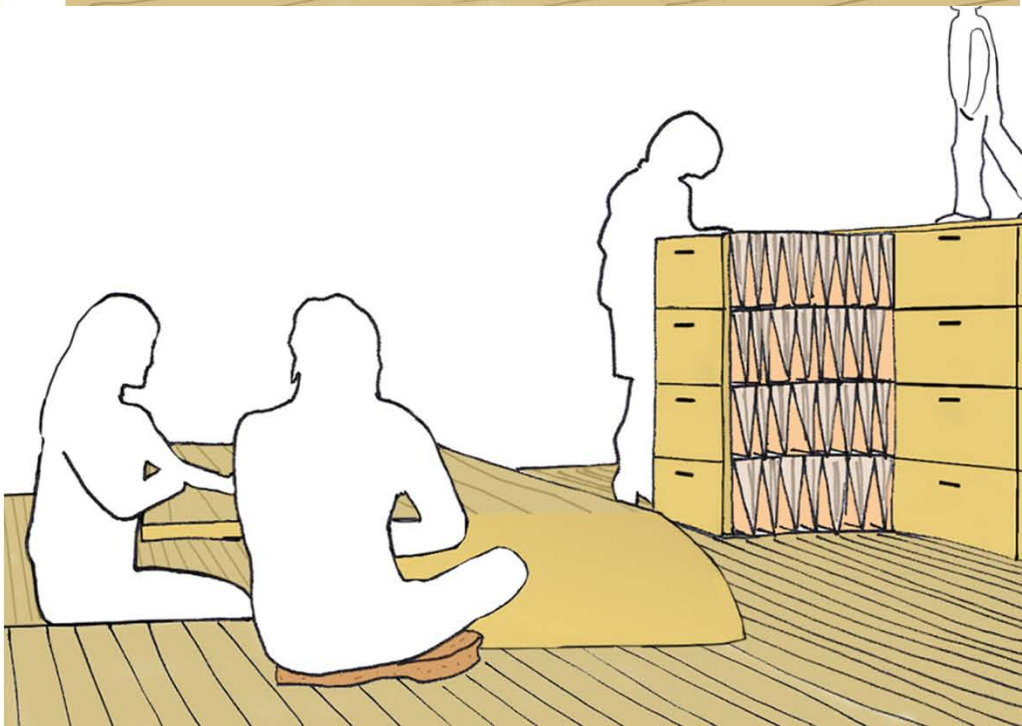
Product qualities:

Subtle
Undefined
Multi-purpose
Diverse
Multisensory









Example: Hospital waiting room

Marcus Boesenach

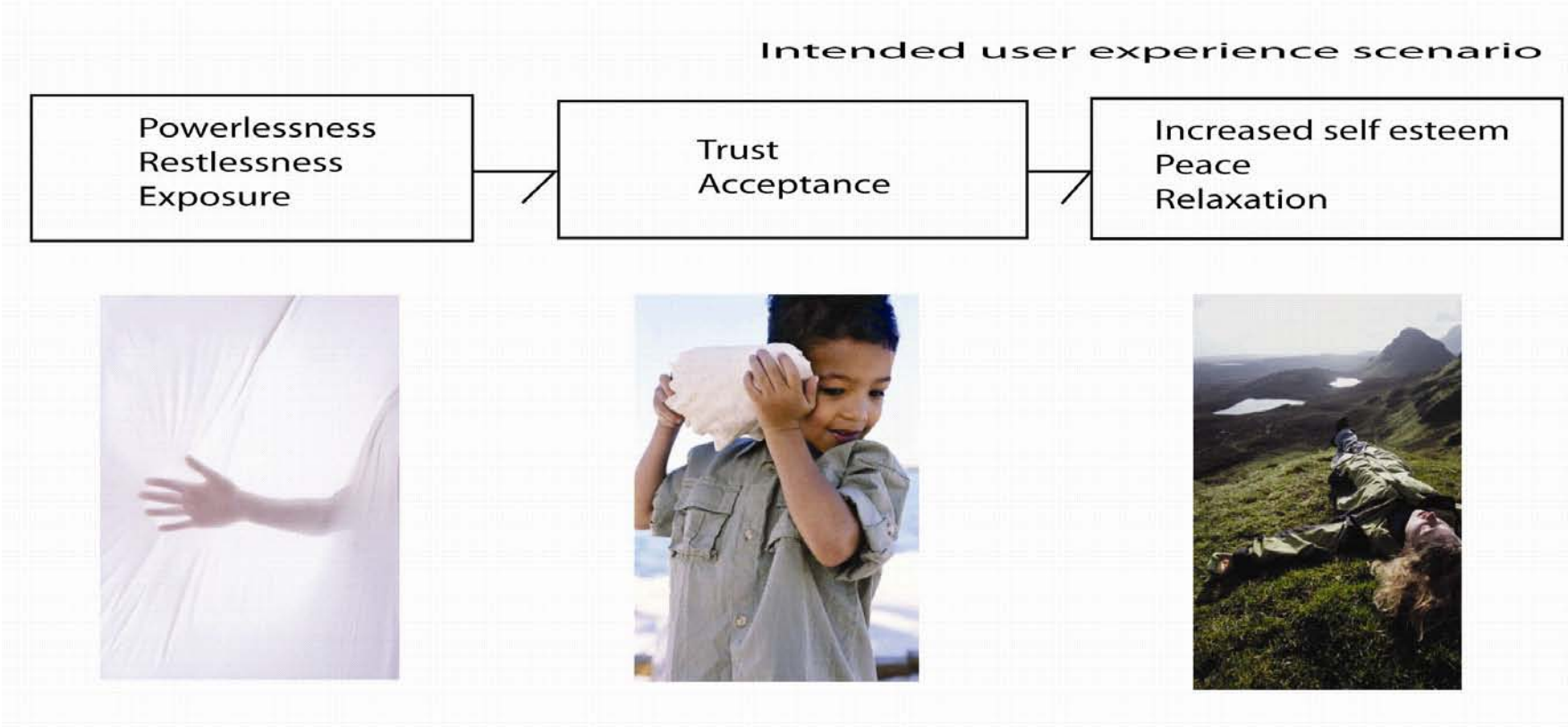
Example: Hospital waiting room

Example: Hospital waiting room

- Hospital environments are unpleasant and do not support the healing process

Example: Hospital waiting room

Marcus Boesenach

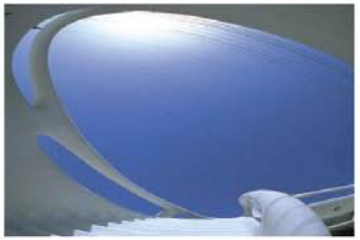


Example: Hospital waiting room

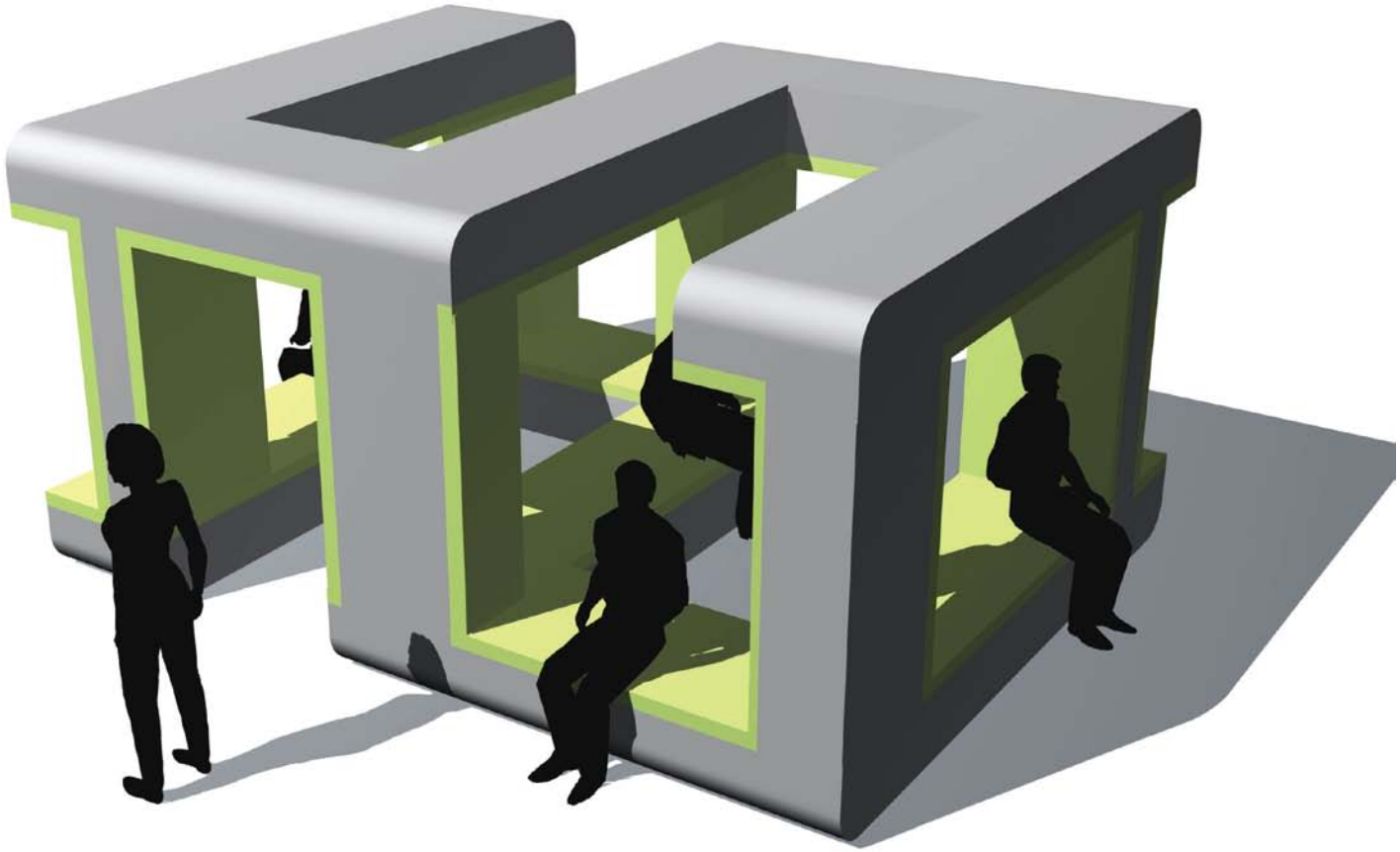
Example: Hospital waiting room

Product Character

Closure Absence Limited Liniairity Ambiguity	Graduality Incompleteness Clarification Integration	Completeness Compactness Promising Freedom Protection



Example: Hospital waiting room



ViP

Hekkert & van Dijk (2011)

0. Deconstruction
1. Domain and time frame
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Physical, Social, Cultural etc.

3. Context structure
4. Design statement
What experience would you like to offer people, within the context?

Experience

5. Human-product interaction
How would you like to offer...

Personality, Expression

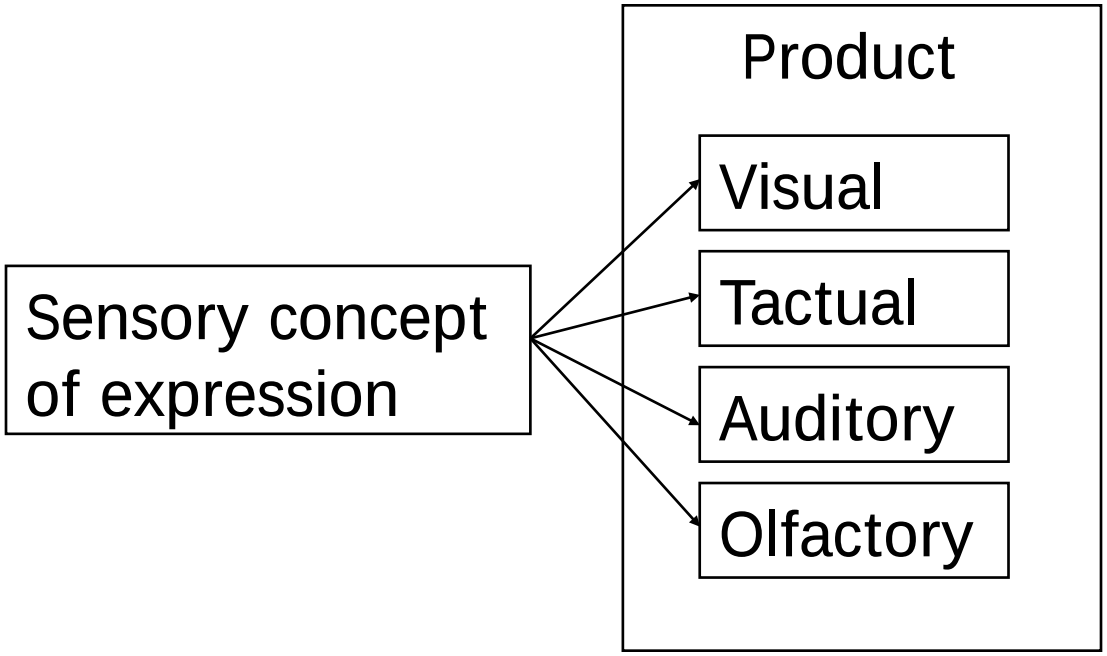
6. Product qualities
7. Concept
8. Final manifestation

Materials, Shape, Components

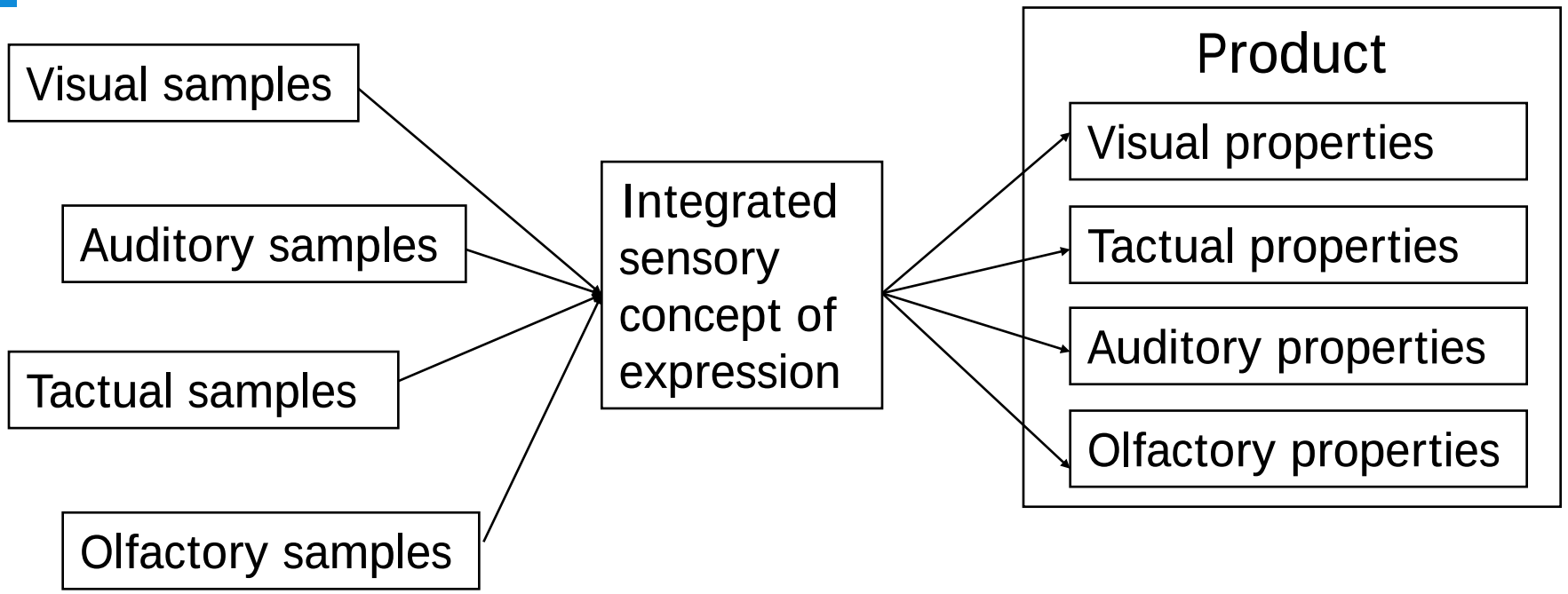
Multi Sensory Design

(e.g., Schifferstein in Delft Design Guide, 2010)

Designing *for* an experience = designing the experienced *expression* of the object



Explore → *Design*



Multi Sensory Design (MSD) in 8 steps

- Select expression

The product should be arrogant, friendly, naïve, wise, cheerful, tough, lazy, elegant

- Conceptual exploration
- Sensory exploration
- Sensory analysis
- Sensory-conceptual integration
- User interaction scenario
- Model making
- Multisensory presentation

Multi Sensory Design (MSD) in 8 steps

- Select expression
- Conceptual exploration

When I say ‘natural’, I think of...

- Sensory exploration
- Sensory analysis
- Sensory-conceptual integration
- User interaction scenario
- Model making
- Multisensory presentation


TENSION
INTENSE
DISTURBING
COMPLEXITY
CONTRAST
PARADOX
UNBELIEVABLE
Dr. Phil
THE BEATLES
INTRIG
OUR KIND OF CRAZY
ELITE
AWE
BEAUTIFUL
MYSTERIOUS
WORKS BEYOND

Multi Sensory Design (MSD) in 8 steps

- Select expression
- Conceptual exploration
- Sensory exploration

Gather materials that are all perceived as ‘natural’

How does ‘natural’ smell, feel, taste, look, sound?

- Sensory analysis
- Sensory-conceptual integration
- User interaction scenario
- Model making
- Multisensory presentation

How does ‘naturalness’ feel, smell, look, sound, taste?












Sensory exploration

- Close your eyes, bring objects close to your senses
- Explore environment, direct attention to common objects
- Move objects, use objects, take objects apart

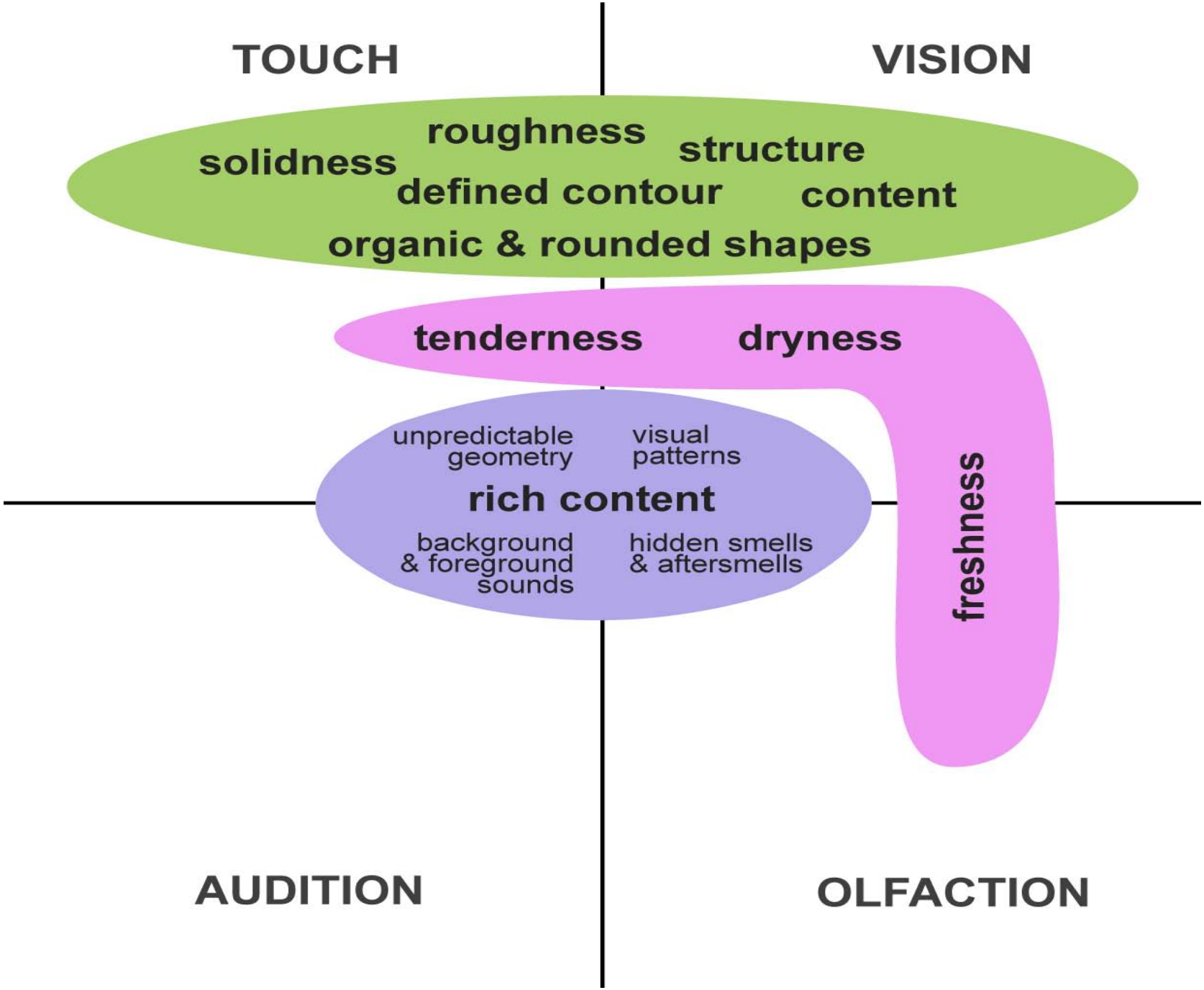
Multi Sensory Design (MSD) in 8 steps

- Select expression
- Conceptual exploration
- Sensory exploration
- Sensory analysis

What are the sensory dimensions that underlie 'naturalness'?

Make a sensory map

- Sensory-conceptual integration
- User interaction scenario
- Model making
- Multisensory presentation

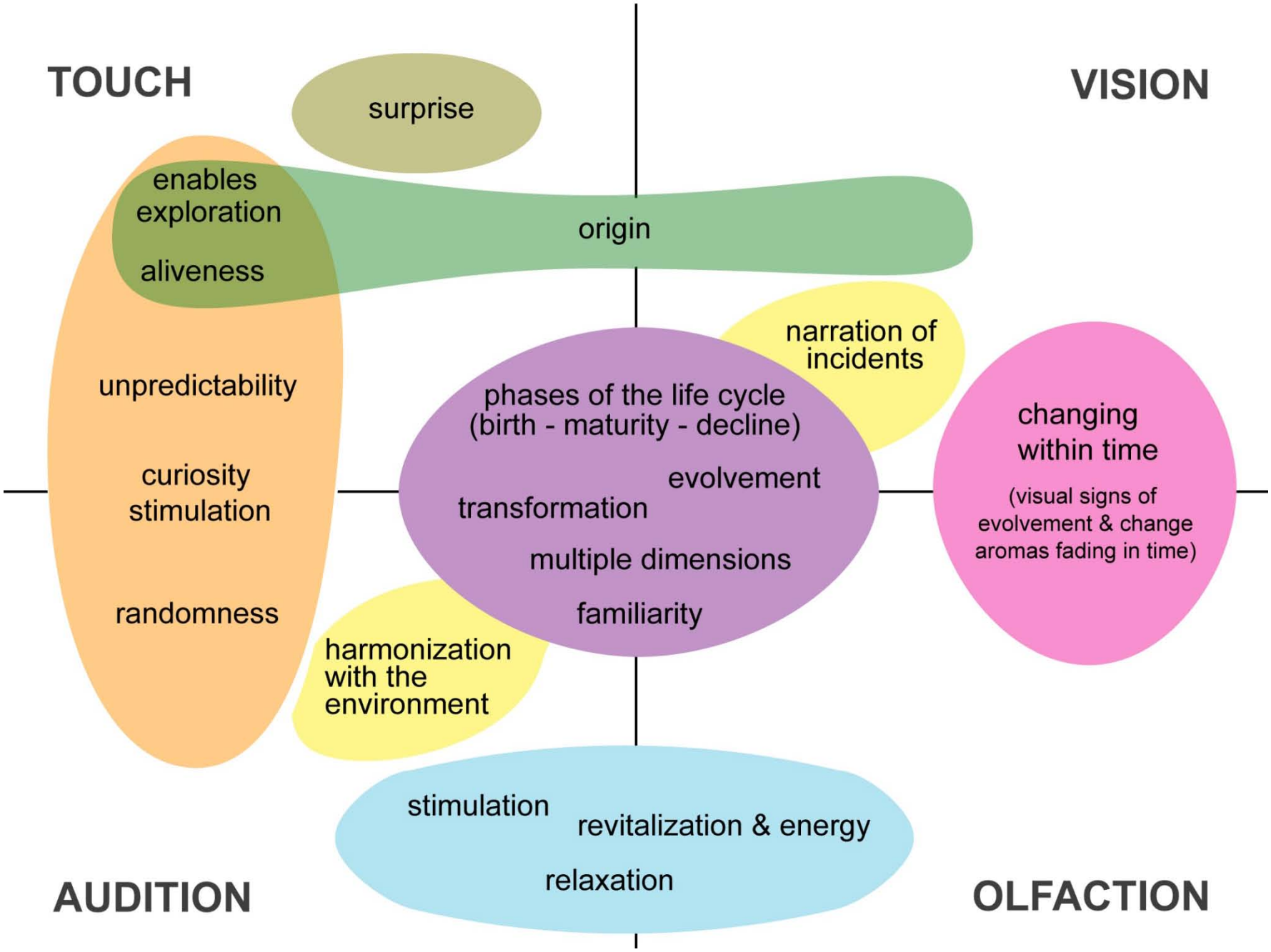

TOUCH
VISION
roughness
solidness
structure
defined contour
content
organic & rounded shapes
tenderness
dryness
unpredictable geometry
visual patterns
rich content
background & foreground sounds
hidden smells & aftersmells
freshness
AUDITION
OLFACTION

Multi Sensory Design (MSD) in 8 steps

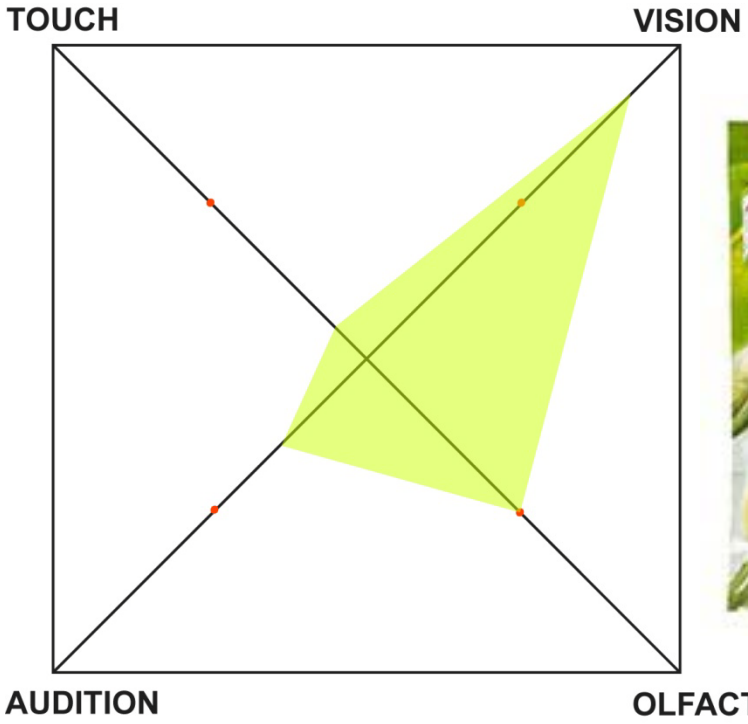
- Select expression
- Conceptual exploration
- Sensory exploration
- Sensory analysis
- Sensory-conceptual integration

Combine results of sensory analysis, conceptual exploration, and brand analysis in one map

- User interaction scenario
- Model making
- Multisensory presentation


TOUCH
VISION
surprise
enables exploration
aliveness
origin
unpredictability
curiosity stimulation
randomness
narration of incidents
phases of the life cycle (birth - maturity - decline)
evolvement
transformation
multiple dimensions
familiarity
changing within time
(visual signs of evolvement & change aromas fading in time)
harmonization with the environment
stimulation
revitalization & energy
relaxation
AUDITION
OLFACTION

Knorr's current soup package



Vision
Appealing/Impressing
Appetitive
Freshness

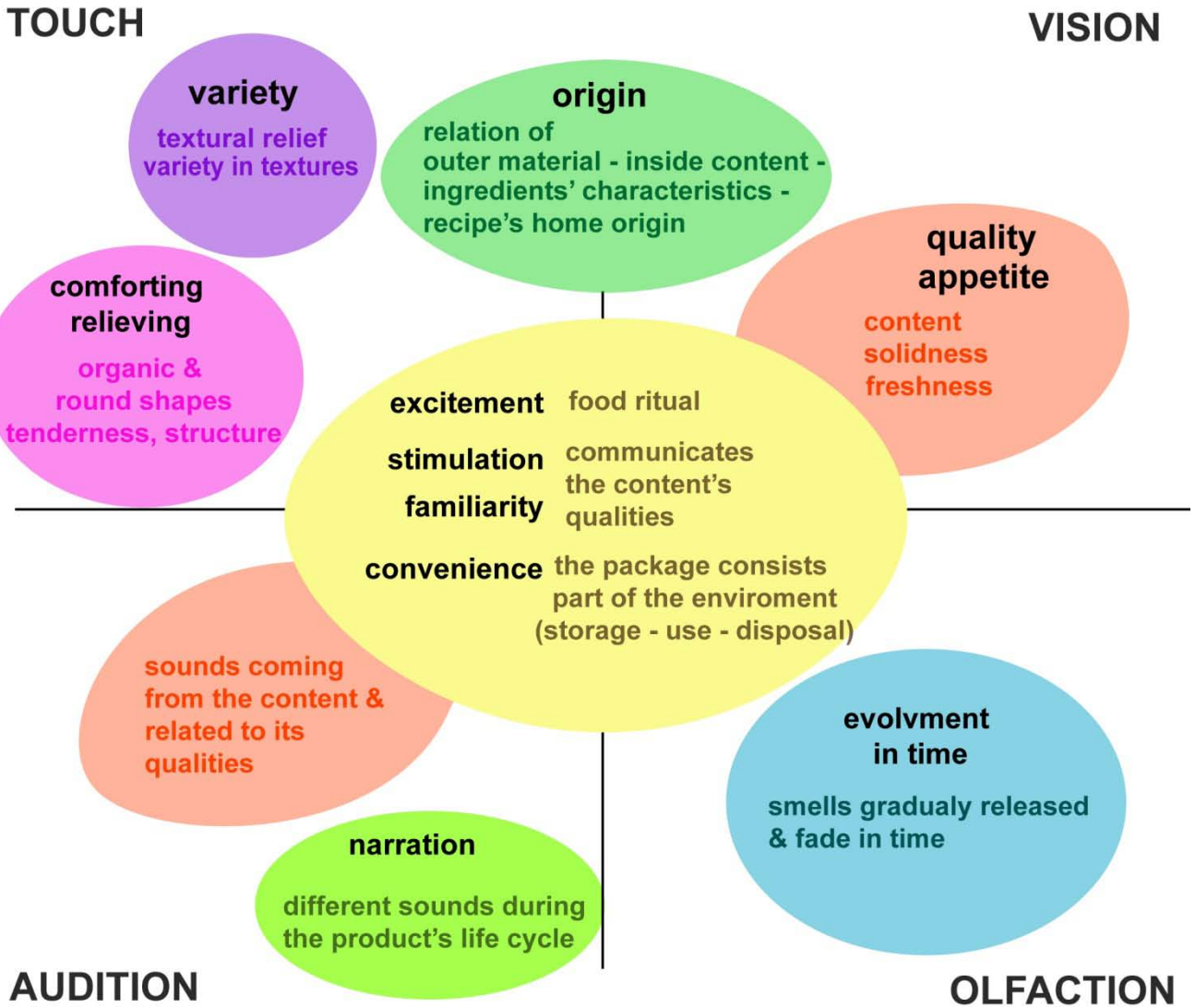
Touch
Artificial/ Plastic
Sharpness
Hurtful
Unconnected with the product

Audition
no relation to the product
Crinkled sound

Olfaction
No smell when closed
Sudden during opening & use
Product's smell remains on the package

Communicating 'naturalness' in Knorr's soup packages

conceptual map with sensory characteristic



Multi Sensory Design (MSD) in 8 steps

- Select expression
- Conceptual exploration
- Sensory exploration
- Sensory analysis
- Sensory-conceptual integration
- User interaction scenario

Make a complete story:

Who is the user? What is the context? How does the interaction evolve?

How are senses involved in each stage?

- Model making
- Multisensory presentation

During Purchase 1.

Through vision, the consumer is attracted to the product on the shelf. After this the product is being selected for purchase.

When the consumer holds the package in its hands, it feels the different textures of the materials.

During Purchase 2.

Audition is stimulated when the package is being torn in order to be removed from the shelf.
It is also stimulated by the crispy sounds coming from the packages' materials. When the package is placed in the basket, the consumer can hear the sound of the product inside.

The consumer feels the different textures of the materials, when obtaining the package.

During Purchase 3.

The consumer experiences a 'natural' smell coming from the with aroma impregnated outer material of the package.

At Home (storing it) 4.

All the senses are stimulated while the consumer removes the package out of the shopping bag and stores it.

At Home (opening it) 5.

Touch, audtion and olfaction are simultaneously stimulated as the consumer holds the package and tears to open it.
Apart from the package's smell, the consumer experiences the olfactory properties of the product inside.

At Home (using it) 6.

The sense of smell is stimulated more as the the package's content is poured into the boiling water.

Multi Sensory Design (MSD) in 8 steps

- Select expression
- Conceptual exploration
- Sensory exploration
- Sensory analysis
- Sensory-conceptual integration
- User interaction scenario
- Model making

Make collages and physical models for each modality:
use clay, foam, materials, sounds, fragrances

- Multisensory presentation


Knorr
Champignon Crème Soep
goed voor 1 liter soep


Knorr
Champignon Crème Soep
Champignons hebben een volle en romige smaak en geven deze soep een heerlijke zachte smaak. Naast deze variant biedt Knorr nog vele andere complete soepen, ieder met een specifieke smaak. Deze soep is een ideaal tussendoortje of een goed begin van de maaltijd.
Bereidingswijze
voor 1 liter soep
1 Zet 1 liter koud water op, voeg de inhoud van dit zakje Champignon Crème soep toe.
2 Breng het geheel al roerend aan de kook. Laat de soep 1 minuut zachjes doorkoken.
Groentetips
Kook 200g gemengde paddestoelen in plakjes en 2 eetlepels bleekselderij gesneden mee.
Voeg als de soep kookt 1 kleine prei in ringetjes gesneden toe. Roer vlak voor het serveren 80g (jonge) verse kaas door de soep.
Variatietip
Warm 1 eetlepel grove mosterd mee in de soep, en bestrooi de soep met fijngesneden peterselie vlak voor het serveren.

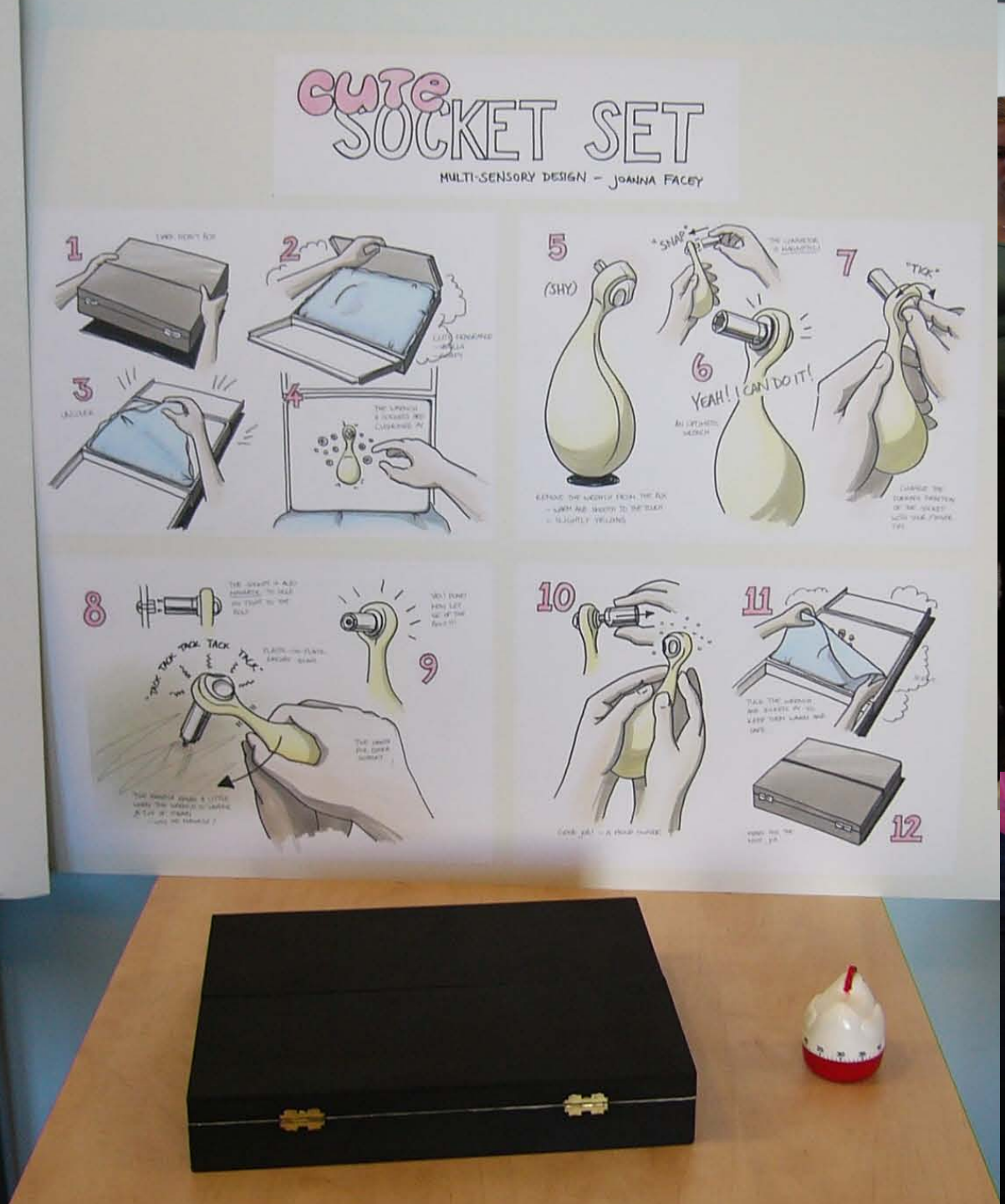

Knorr
Tomaat Basilicum Soep
Basilicum is een echte smaakmaker en verrijkt deze heerlijke tomatensoep met een krachtige italiaanse smaak.
Naast deze variant biedt Knorr nog vele andere complete soepen, ieder met een specifieke smaak. Deze soep is een ideaal tussendoortje of een goed begin van de maaltijd.
Bereidingswijze
voor 1 liter soep
1 Zet 1 liter koud water op, voeg de inhoud van dit zakje Tomaat Basilicum soep toe.
2 Breng het geheel al roerend aan de kook. Laat de soep circa 1 minuut zachjes doorkoken.
Groentetips
Variatietip

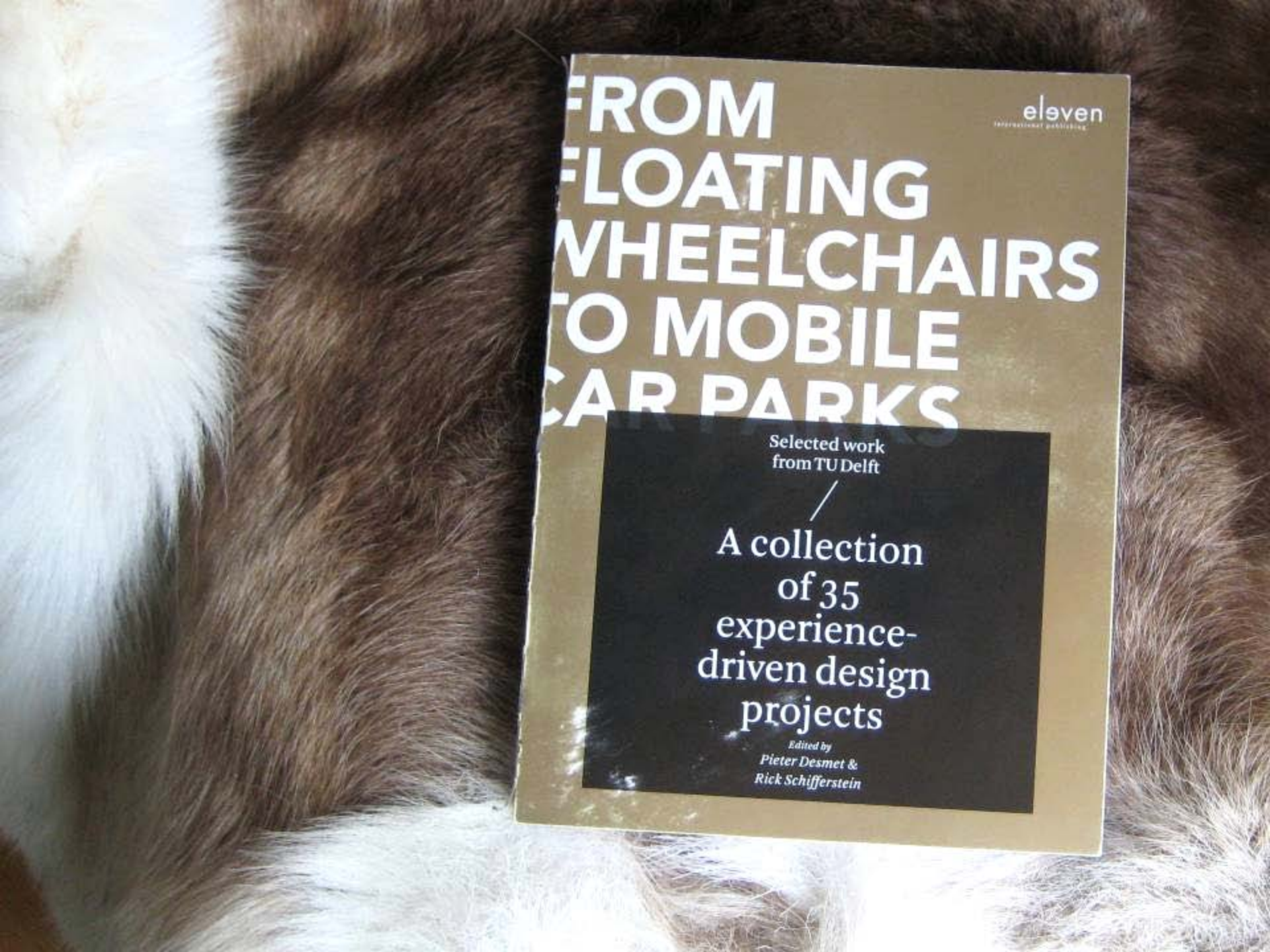

Knorr
Tomaat Basilicum Soep
goed voor 1 liter soep

Multi Sensory Design (MSD) in 8 steps

- Select expression
- Conceptual exploration
- Sensory exploration
- Sensory analysis
- Sensory-conceptual integration
- User interaction scenario
- Model making
- Multisensory presentation

Use story board, with attention for all modalities, present physical samples


CUTE
SOCKET SET
MULTI-SENSORY DESIGN - JOANNA FACEY
1
2
3
4
5
(SHY)
"SHAP"
6
YEAH! I CAN DO IT!
7
"TICK"
8
"TICK TACK TACK TACK"
9
10
11
12


FROM
FLOATING
WHEELCHAIRS
TO MOBILE
CAR PARKS
eleven
Selected work
from TU Delft
A collection
of 35
experience-
driven design
projects
Edited by
Pieter Desmet &
Rick Schifferstein

Xinyu Ma

/

Project

Detergent
Package Design

Title Detergent Package Design	*Designer* Xinyu Ma	*Supervisory team* Rick Schifferstein Pieter Desmet Stan Knoops * (*Unilever R&D)
Company Unilever R&D	*Graduation date* October 2009	

dispenser

Ilse Kroesen

/

Project

Kids' pill dispenser

Title
Kids' pill dispenser

Designer
Ilse Kroesen

Supervisory team
Chris Snijders
Arnold Vermeeren
Annemiek van Boeijen
Freerk van Oudheusden *
Wim van der Pol **
(*Betronic Design)
(** Reinier de Graaf gasthuis)

Company
Betronic Design

Graduation date
November 2003

Koen Vorst

/

Project

A modular rest unit
for a recovery room

ink – Sports for lind children

Gina van der Werf

/

Project

Link – Sports for blind children

Title
Link – Sports for blind children

Company
Stichting Bartimeus

Designer
Gina van der Werf

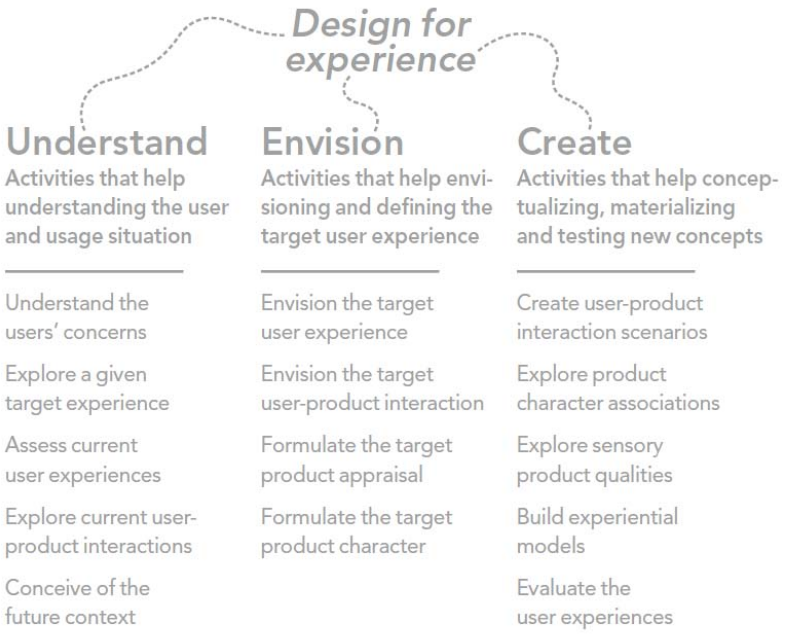
Graduation date
February 2005

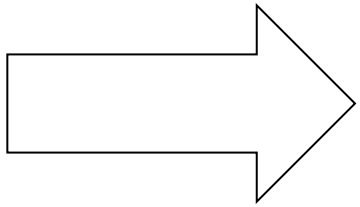
Supervisory team
Paul Hekkert
Marieke Sonneveld
Theo Rooden
Babette Hamburger *
Marten van Doorn **
(*Ontwerpbureau Go)
(**Stichting Bartimeus)

How to innovate, using a target experience?

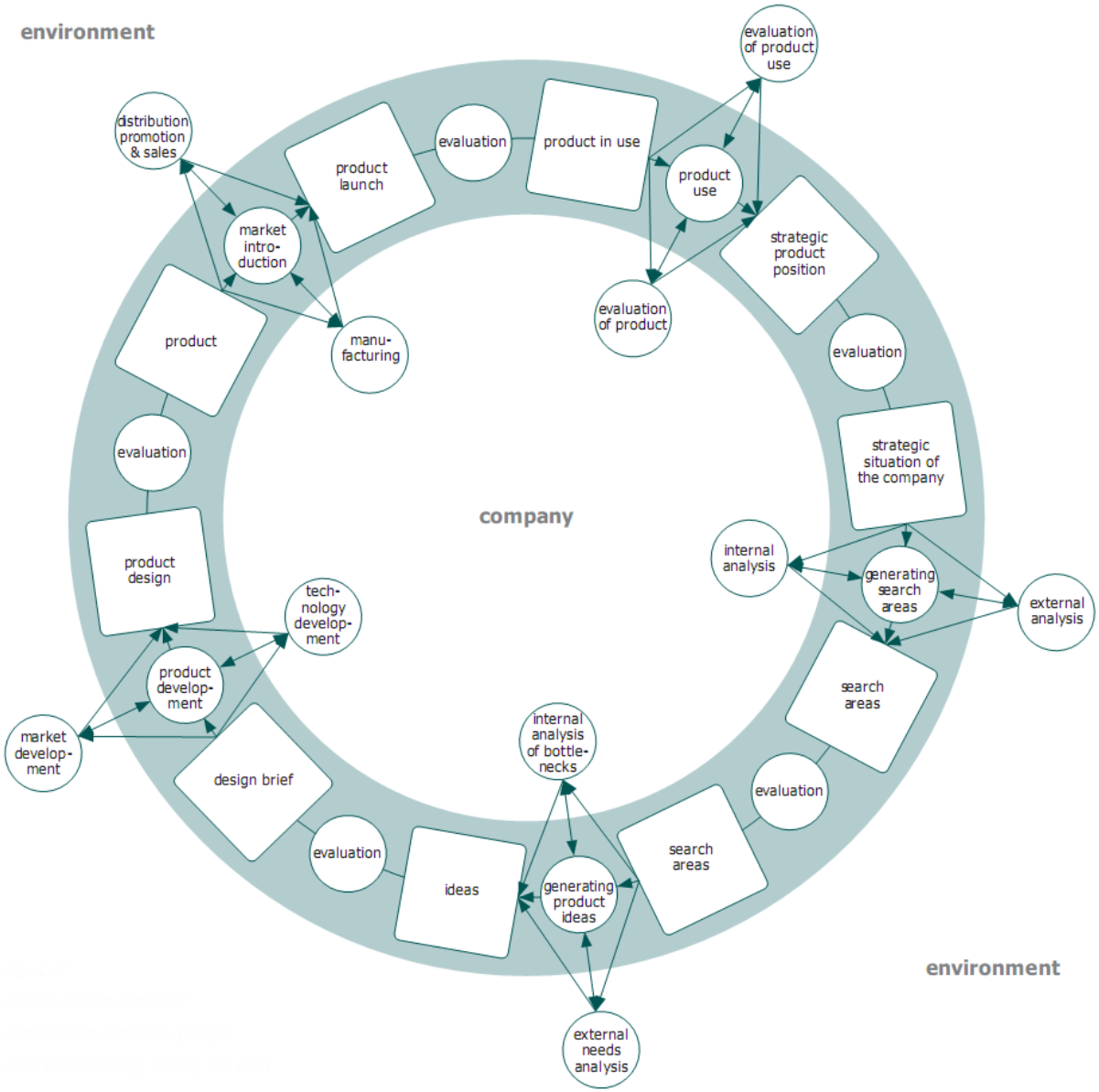
From Experience-Driven Design

To Experience-Driven Innovation





?


environment
evaluation of product use
distribution promotion & sales
product launch
evaluation
product in use
product use
market intro-duction
strategic product position
evaluation of product
manu-facturing
product
evaluation
evaluation
strategic situation of the company
company
product design
internal analysis
generating search areas
external analysis
tech-nology develop-ment
product develop-ment
search areas
market develop-ment
internal analysis of bottle-necks
design brief
evaluation
search areas
evaluation
ideas
generating product ideas
external needs analysis
environment

From Experience-Driven Design

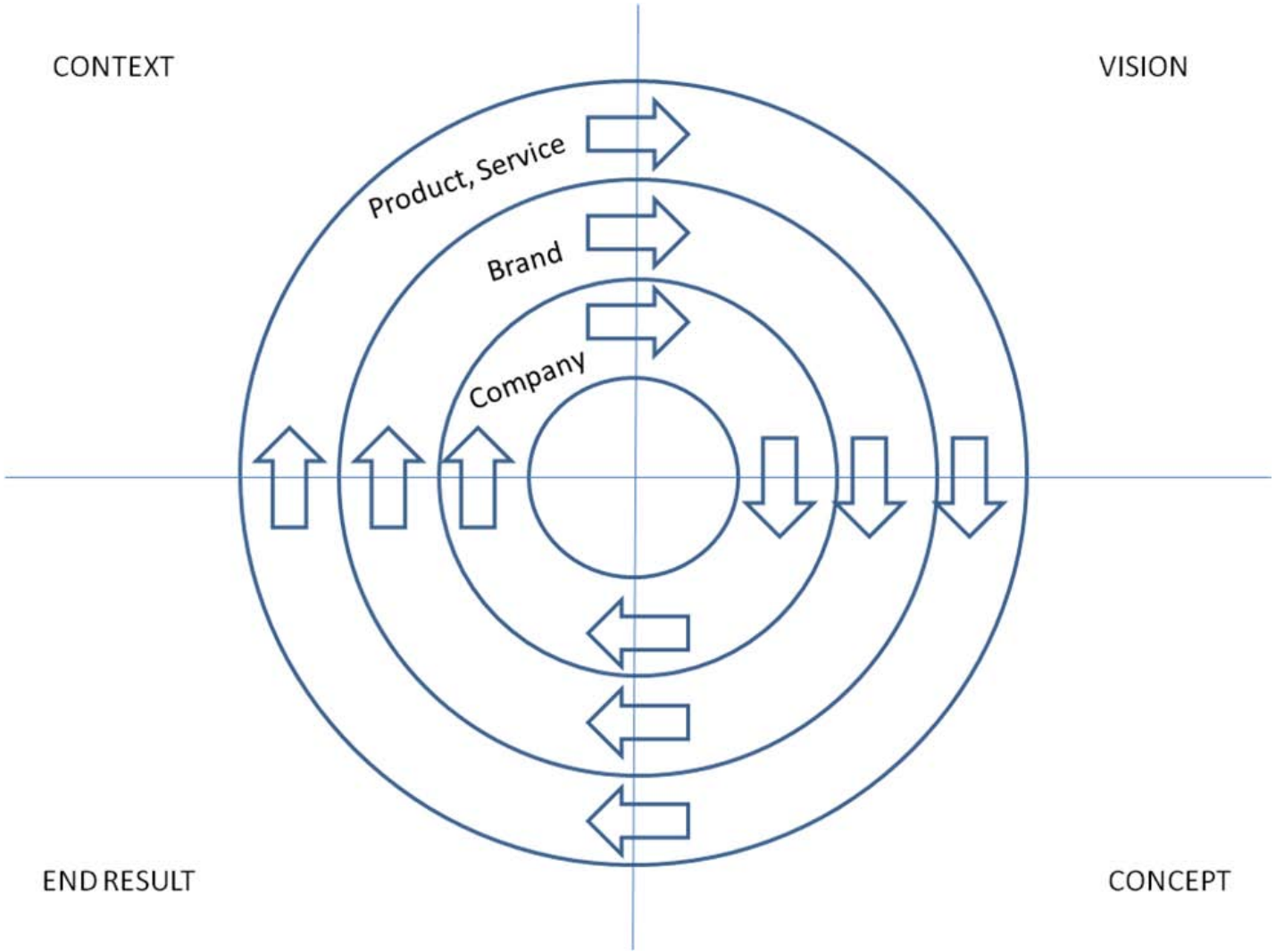
To Experience-Driven Innovation

Discrepancies with industrial business:

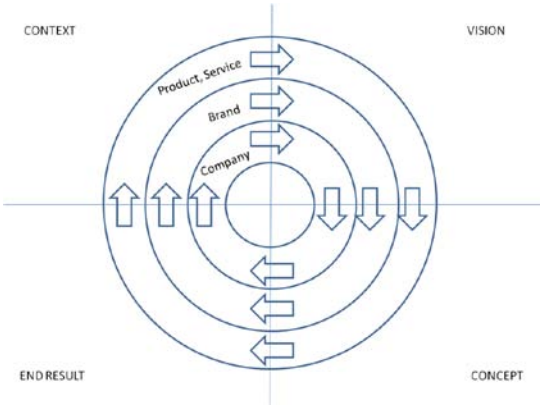
- More complex design assignments: multiple departments, external parties involved
- Project needs to fit in organization: brand positioning, company image, production schedules

How does this holistic design strategy work in practice?

- Make departments work together
- Support project over time


CONTEXT
VISION
Product, Service
Brand
Company
END RESULT
CONCEPT

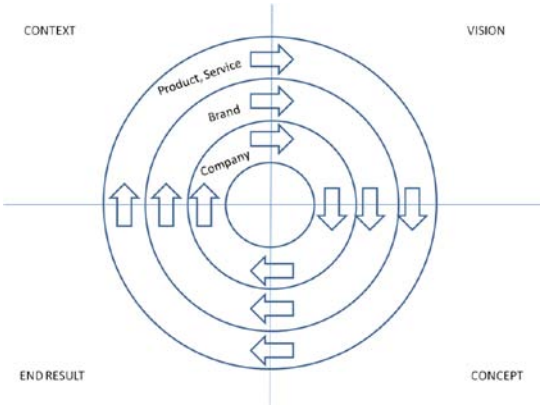
To Experience-Driven Innovation



Organizational measures

1. Develop overarching company mission
2. Integral project management over time
3. Strategic road mapping
4. Interdisciplinary teams
5. Break through organizational routines
6. Use and develop human resources
7. Create employee freedom
8. Build external relationships
9. Internal technological development
10. Build knowledge on latent user needs

To Experience-Driven Innovation



Tools supporting the design process

1. Develop open context vision
2. Develop experience vision statement
3. Pay attention to multiple layers in the user experience
4. Include the time dimension of user experience
5. Involve multiple design disciplines
6. Touchpoint orchestration
7. Empathy tools
8. Formalize brainstorming routines
9. Quick and dirty prototyping
10. Create and present conceptual prototypes
11. Co-create with end users
12. Formalize choice among ideas

Experience-Driven Innovation

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Your Activity

Start a: Discussion Poll

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Latest Discussions

At the moment we are working on a new website on Experience-Driven Innovation. For this website, we are looking for companies who would...
For each project, we would like to have a description of the project and visual materials that illustrate the project. For more detailed ...
posted 21 days ago

See more »

Arnold
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CfP CHI2012 Workshop on "Theories behind UX Research and How They Are Used in Practice"

Theories Behind UX Research and How They are Used in Practice di.ncl.ac.uk
At CHI2011 we organized a SIG session asking the question "What theoretical roots do we build on, if any, in UX research?" Overall, 122 single items from about 70 participants were collected, which corroborates the relevance of...
posted 3 months ago

Latest Updates

Nicolette Vanderklaauw-NJ has joined the group.
Send message • 17 hours ago

JODY PARRA has joined the group.
Send message • 1 day ago

Gunay Guler has joined the group.
Send message • 5 days ago

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MEMBERS

3,759

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EXPERIENCE DRIVEN INNOVATION

Welcome to Experience Driven Innovation

We created this website for people who want to improve peoples daily experiences with the products and brands they buy, the services they obtain, and the websites they visit. By taking the users´ experience as the starting point of the innovation process, future interactions between consumers and their products are likely to become more diverse, more interesting and more engaging. Feel free to join our community and contribute to the creation of experience-driven innovation!

Documents

Overall Aim

Feb 08, 2012 | 0 Comments

Projects

Project: Heritage Browser

Feb 22, 2012 | No Comments »

TWEETS #ExpDI

AccuBraille: RT @designworkplan: Love it! RT @designbyfire: Sneak preview at a new website on experience-driven innovation http://t.co/6qNnGjsx #expdi
14 hours ago

wmellaart: +1 RT @designworkplan: Love it! RT @designbyfire: Sneak preview at new website on experience-driven innovation http://t.co/Wy3DTcuZ #expdi
15 hours ago

designworkplan: Love it! RT @designbyfire: Sneak preview at a new website on experience

EXPERIENCE DRIVEN INNOVATION

Projects

Here you can find example projects that have used an experience-driven innovation approach. All these projects led to an end result that was realized. Currently, we are still looking for additional projects that may be added to our website. In order to show the wide applicability of our innovation approach, these projects may include a product that was introduced on the market, a service provided by a government agency, the design for a retail store that was built, and so on. If you would like to add one of your projects, please contact us or click here.

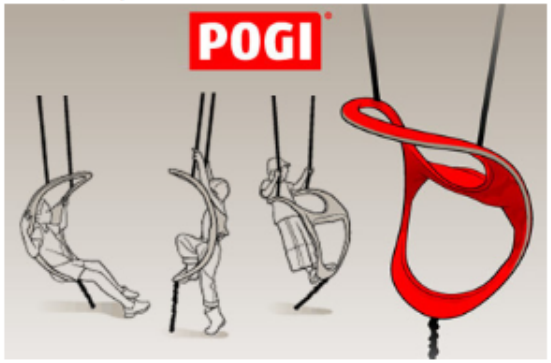
Project: Heritage Browser

Feb 22, 2012 | 0 Comments

The Heritage Browser is a multi-user interactive installation based on a multitouch table for Public libraries and City Archives. By using only their membership card, library visitors can view images of their own street. The multitouch interface allows for visitors to search alone or together, without further knowledge or computer skills . By immediately showing the images they recognize they are

Project: Pogi

Feb 06, 2012 | 0 Comments



The Pogi is a playful object, developed for children with ADHD. It can be described as a three-dimensional hoop, which is connected to the floor and the ceiling with elastic straps. The design and construction of the Pogi allow children with an excess of energy to let off steam while they play with it.After my graduation I approached Janssen-Fritsen, the Dutch market leader on gymnastic equipment for schools, to see if they

CONTRIBUTE

Do you have a project that can contribute to the EDI database? Click on this link to find out how.

TWEETS #ExpDI

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Thank you!

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@tudelft.nl