KONE Care For Life

INFORMATION DESIGN FOR KONE CORPORATION

Lahti University of Applied Sciences/
Institute of Design

Degree programme in Design

Packaging Design and Information Graphics

Pia-Maria Sissala

Graduation Project

spring 2009

KONE Care For Life

INFORMATION DESIGN FOR KONE CORPORATION

I wish to thank the following people for contributing in this project.

Kaisa Pekkala, Olli-Pekka Varis and François des Pallières, Mikko & Anna-Kaisa Sissala, Jyrgen Sanides, Marja Lampainen, Kari Halme, Eeva, Andy & Tuomas

Tiivistelmä

Lahden ammattikorkeakoulu/
Muotoiluinstituutti

Muotoilun koulutusohjelma

Pakkausmuotoilu/ tuotegrafiikka

Pia-Maria Kristina Sissala

kevät 2009

Care For Life -
Informaatiografiikkaa KONE Oy:lle

Opinnäytetyö

88 sivua

AVAINSANAT

Informaatiosuunnittelu
informaatiografiikka
graafinen suunnittelu
kuvitus
varoitus
piktogrammi,
hissi, turvallisuus

Opinnäytetyöni on toimeksianto suomalaiselta hissi- ja liukuporras yhtiö KONEelta. Kuluneen syksyn ja talven aikana opiskelin informaatiosuunnittelun periaatteita, keskittyen informaatiografiikkaan ja erityisesti piktogrammisuunnitteluun. Työni produktiivinen osa koostuu 74:stä turvallisuusriskien kuvituksesta, joita kutsutaan nimellä “Safety Icons”, sekä modernisaatio raportin, “Equipment Condition Assessmentin,” uuden visuaalisen ilmeen suunnittelusta. Raporttia varten piirsin myös 12 arviointialuetta kuvaavaa otsikkoikonia. Tarkoituksenani on toimivan ja ymmärrettävän tutkimustulosraportin lisäksi luoda hyvät perusevät Care For LIfe-brändin visuaalisen ilmeen rakentamiselle, joita voidaan jatkossa hyödyntää tehokkaasti eri medioissa. Tarkoituksenani ei ole suunnitella visuaalista identiteettiä sanan varsinaisessa merkityksessä, vaan auttaa luomaan yhtenäinen ja persoonallinen kokonaisilme visuaalisten elemenntien, kuten kuvituksen keinoin. Sovelluksina tästä aiheesta olen hahmotellut Care For Life- tunnusta, sekä konseptin markkinointimateriaaliksi.

Abstract

Lahti Univeristy of Applied Sciences/
Institute of Design

The Degree programme in Design

Packaging and Graphic Design

Pia-Maria Kristina Sissala

spring 2009

Care For Life - Information design for KONE Corporation

Graduation Project

88 pages

KEYWORDS

information design
information graphics
graphic design
illustration
safety, warnings
pictogram, elevator

My final project is done for the KONE Corporation, which is a finnish elevator and escalator company. During the autumn 2008 and winter 2009, I studied the subject of information design and different ways of presenting information visually. Based on all the knowledge gathered, I re-designed 74 pictures illustrating the potential hazardous situations in ones existing elevator. The illustrations presented in this project are named as the "Safety Icons". The process finally led me to analyse the existing Care for Life-report and to re-design the new visual lay-out for the Equipment Condition Assessment, where the Safety Icons are used.
Besides creating a functional and understandable document of survey results, the aim of this design process was to set a foundation for a uniform visual look of the KONE Care For Life - brand, so that it can be used efficiently in different medias.
To demonstrate this I created a conseptual level idea of marketing material.

Content


4
5
6
M

Foreword

**< Airports airports are often the best showrooms for modern information design.
The München International Airport in Germany has been awarded many times as the best airport in the world.**

Sissala, 2008

This graduation project has led me to the world of information design and different ways of presenting information visually: from corporate identities to traffic signs and from instructional illustrations to way finding systems. I entered this fascinating world in order to attack a design task to illustrate and to explain possible safety hazards of elevators in the need for modernization.

A growing trend among the words population is that people are living longer. Safety and accessibility in everyday life are essential people with disability want to live at home. The aim of this design project is to help the KONE customers understand the potential safety hazards in thier lift equipment, and to make the decision of providing safety and accessibility via modernization for tenants more desirable.

Another global trend is that the world is actually getting smaller. People travel and move more and more from one place to another, and the borders of countries have never been as close and as easy to cross, as today. In the meeting point of cultures and languages, we need to pay extra attention to non-verbal communication. In order to understand each other, we need clear information, and in order to receive information in a more clear and logical form, we need information design.

As KONE operates internationally, this design task has required studying intercultural communication. The end product is sold by KONE Sales persons world wide concentrating on customers in Europe and in the US. In this project, I have done my best to visualize complex facts and situations based on detailed technical information so that anyone willing to exam the condition of their lift equipment will be able to understan the Equipment Assessment and to understand what types of hazards their elevator possibly has. Luckily, when presenting this type of information to an international audience, we have the opportunity to communicate with non verbal ways that is images, such as pictures, shapes and colors, as well as facial expressions. The tone of voice, too, has an impact in sending a message, as well as receiving one. These aspects should also be taken into consideration when communicating corporate identity, as well as the character of a brand.

DELI is an integrated solution of automatic building door, user identification system and elevator.

1 The aim of DELI system is to ease the tenant's passage from the building entrance to his/her home door. The identification tag and the identification reader enables all the following actions.

2 The automatic door will open by showing the ID tag to the ID reader near the entrance door.

3 When DELI system has recognized the user it turns on the staircase light automatically.

4 Elevator landing call is made automatically by the system. Elevator doors are automatically opened as the elevator arrives to the entrance floor.

5 Also car call to user's home floor is made automatically by the system as user enters the car.

6 When leaving the building the door opening can be activated by a motion sensor.

DELI USER GUIDE

BUILDING DOOR AND ELEVATOR INTEGRATION

FINDING THE TOPIC

< The KONE Deli User Guide: instructional pictograms by Pia Sissala and Essi Pailinna.

Sissala, 2008

Information graphics and way finding systems have fascinated me for a long time. When travelling or going out, I have created a little hobby of spotting stylish restroom-signalization and other graphical elements in public spaces. In my opinion, this type of design, ranging from small details to large ensembles of environmental graphics directing our behaviour, are the best possible example of 'design for all'. Often this kind of “invisible design” makes everyday life easier, more sufficient and provides joy to everyone from a single person, to big masses travelling from destination A to B. Comparatebly, this type of situation can take place at ones home, dealing with a packages that is easy to open and presents clear instructions on how to recycle after use.

I enjoy myself at airports, in a no-mans-land of clear and functional visual information. Not exactly a coincidence that international airports are in particular the best showrooms for modern information design and different types of guiding signs targeted to multicultural audiences. Yet history has seen too many bad examples of what can happen, if these kind of things are left without proper design.

In June 2008 I had a chance to study the subject of pictograms and information design more deeply for the first time, when designing a brochure and other promotional material for a new solution called Kone DELI as a freelancer project together with my classmate Essi Pailinna. The Deli material appeared to be a small success and at the end of summer 2008, KONE Global Marketing Manager Kaisa Pekkala approached me asking if I was interested in a bigger project concerning pictogram design and informational illustration. She told me loosely about a document that had about 80 topics concerning safety hazards in elevators that needed to be re-illustrated. Tough I was highly interested, my only concern was the timetable: Pekkala told me the client was hoping the drawings to be ready by the end of the year 2008, the same time as my final project. The attempt of trying to handle two as big as projects as these at the same time was also a thought that made me wonder weather I was going to loose my mind by the end of the year. After a few distressed moments and discussions with my friends and relatives I came to a conclusion that it might be possibility to think about this project as material for my final thesis.

Terms

CORPORATE IDENTITY

Corporate Identity is a strategic instrument used very purposefully in company management, and contributes to the success or the failure of an enterprise. Corporate identity (CI) defines a companys personality, character and attitude. It addresses the way in which the company perceives itself, and also its ability to communicate its own aims internally and externally. These guidelines can be summed up in a Corporate Identity Manual (also called the brand manual, or brand book) (Bilz, 2007, 237)

CORPORATE DESIGN/ VISUAL IDENTITY

Corporate Design brings the complex qualities and achievements of a corporate personality together and forges them into a memorable, uniform and credible visual statement. When the corporate design of a corporation matches its corporate identity, then its statements on identity and appearance will be credible. The basic elements contributing to a corporate designs overall impact are the Logo, Color, Climate (corporate colors), Typography, Pictorial Language and Design Principles. All these elements are fixed in writing in a manual. (Bilz, 2007, 238)

INFORMATION DESIGN

Information design is the skill and practice of preparing information so people can use it with efficiency and effectiveness. It is about the selection, organization and presentation of information to a given audience. (Wildbur, Burke, 1998, 6)
In this thesis I will talk about information design as visual design of visual information.

NONVERBAL COMMUNICATION

Non verbal communication usually understood as the process of communication through sending andreceiving wordless messages. Such messages can be communicated through gesture; body language or posture; facial expression and eye contact; object communication such as clothing, hairstyles or even architecture; symbols and infographics (Wikipedia, 2008)

PICTOGRAM

A pictogram is a pictorial symbol with a fixed meaning. Pictograms are modern signposts. Their job is to pass on subject matter and information unambiguously, quickly and very strickingly. A pictogram performs many functions: it can refer, indicate, forbid, warn, report conditions, designate, name or classify.
(Bliz, 2007, 36)

SYMBOL/

A symbol is representative and has no formal connection with what it designates. If the communication of information is to be successful and clear, sender and reciever must first agree on the meaning of the symbol. – this is why a symbol is dependent on culture. Symbols are particulary suitable for representing complex facts and abstract consepts such as love, which in most countries is commonly symbolized by the colour red and the shape of a heart.
(Abdullah & Hubner, 2006,15)

Introduction


KONE
KONE
CE

Introduction

KONE IN BRIEF

KONE vision is to deliver the best People Flow-experience

Kone Media library,
Jukka Male, 2006

KONE is a finnish corporation, that provides innovative and sustainable solutions for elevators, escalators and automatic building doors. The aim of the company is to support their customers every step of the way; from design, manufacturing and installation to maintenance and modernisation.

CUSTOMERS

KONE's key customers are constructors, building owners, facility managers and developers. In addition, architects and consultants are key parties in the decision-making process regarding elevators and escalators. KONE has segmented the markets according to the purpose of the building. The main segments are categorized as residential, office and retail, as well as public transportation and airports. In addition, KONE provides servises hospitals, leisure centers, hotels and industrial properties. KONE has approximately 250,000 customers globally, of which the majority are maintenance customers. Maintenance contracts vary from one-elevator residential buildings with yearly contracts to large international accounts with long-term service agreements.

LOCATIONS

KONE is present in around 50 countries worldwide. The company has eight production units in all main markets and seven global R&D centers. KONE's head office is based in Espoo in Finland.

VISION

KONE delivers the best
People Flow™ experience.

STRATEGY

KONE delivers a performance edge to its customers by creating the best user experience with innovative People Flow™ solutions. Simultaneously, KONE's people leadership and processes enable operational excellence and cost competitiveness

Old residential buildings in Kruununhaka, Helsinki

www. flickr.com

KONE CARE FOR LIFE

In many countries, more than half of the existing elevators are 25 years old or older. Few of them have been modernized to meet current safety and performance requirements. The elevators are used by a large amount of people moving up and down in a building everyday and the elevator has to live up to certain expectations. It has to function 24 hours a day and meet the demands of today´s requirements concerning safety, reliability, the traveling experience and accessibility.

Nevertheless, ageing elevators can be made more effective, safer, more reliable, and more comfortable through regular maintenance and improvement.
Kone Care for Life is a KONE Corporation Sub-brand, and the name for the equipment condition survey, which is a service provided by KONE worldwide.
The survey is the decision makers´ (house representatives, architects) tool that helps them to authenticate the condition of ones existing elevators and the prioritisation of possible modernization demand on the lift equipment.
With the KONE Care for Life analysis, it is possible to produce a survey concerning performance, safety, accessibility and aesthetics.

BRAND VALUES

- Safety
- Performance
- Accessibility
- Aesthetics
- Eco- efficiency

Majority of existing elevators in old buildings are over 25 years old and therefore a safety risk for the tenants. KONE Care For LIfe provides a modernization survey for not modernised lift equipment

www.flickr.com

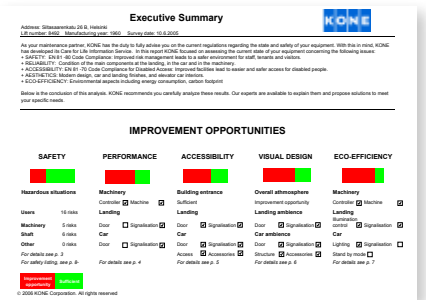
THE CARE FOR LIFE REPORT

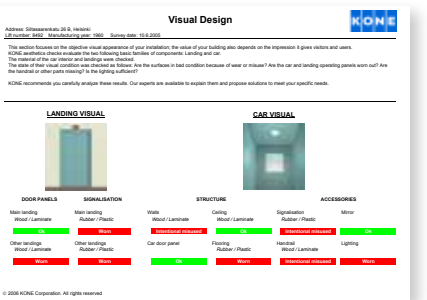
The Care for Life report is the document which containins the survey results and is given to the customer by a KONE salesperson. The report comes in a A4 standard-sized document booklet, as well as in pdf -file format. The page amount varies depending on the case and the amount of safety hazards in case of the equipment in question. Kone has had the Care for Life-report in use for several years now, and the company has recieved some feedback and development suggestions concerning the existing report. The Care for Life -brand hasn´t had any visual identity of it´s own, but has followed the general visual guidelines of the KONE Brand Book.

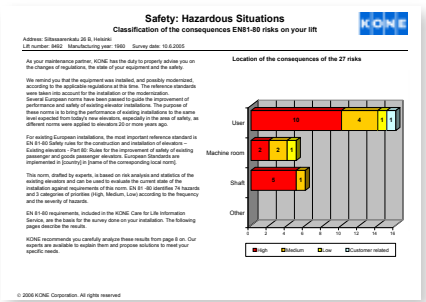
Tough KONE has the Visual Guidelines for presenting visual material, the guidelines do not cover all the necessary topics. They do not contain regulations concerning graphs and charts and other elements visualizing information, that is instructional illustrations or safety signs. This has led to a wide range of different visual outcomes in this area. The materials of different projects and sub-brands have clearly been designed along the way when needed. Once the materials have been created, they have stayed that way. In the worst case for decades, creating an unconsistant ensemble of visual materials.

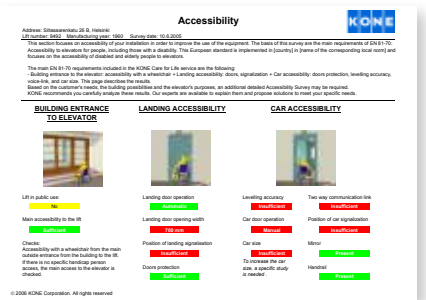
Although KONE Care For Life does not have a logo of its own, some identifying elements have been used, for example a spiral graph, that has performed as somekind of an identification picture. The graph has been placed on the front page of the existing Care For Life- report and Power Point presetations.

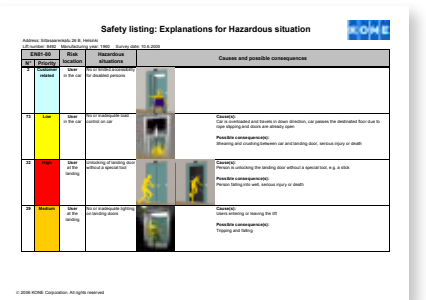
Kone is committed to having a consistent and unified visual identity that represents the company in the best possible way. KONE wanted to develop the Care for Life –report and its layout to be more consistent with the corporate identity as well as clarify the visual messages communicated.











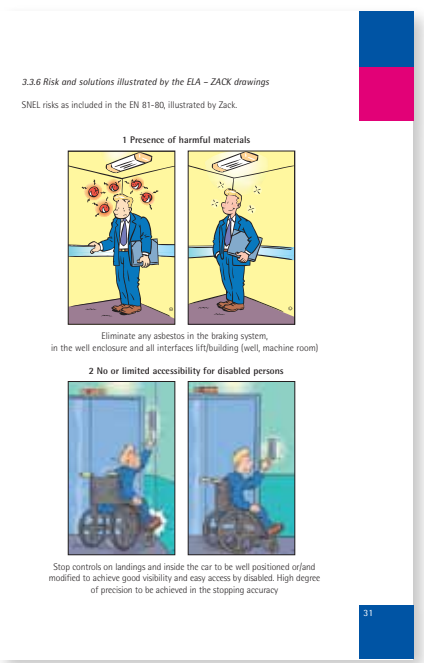
The Care For Life-report, later re-named as the Equipment Condition Assessment, is the tool and the actual end product that is presented to the customer by a KONE Salesperson.

THE 74 EN-81-80 HAZARDOUS SITUATIONS

The European Lift Association, (ELA) represents the lifts, escalators and moving walks associations active in the European Union. The objective of ELA is to promote quality, safety, and the highest technical standards and to encourage technical progress in the fields of manufacturing, installation and maintenance of lifts, escalators and moving walkways.

ELA has standardized an EN 81-80 Safety rules for the construction and installation of lifts. Rules for the improvement of safety of existing passenger and goods lifts, categorizes various hazards and hazardous situations, each of which has been analyzed by a risk assessment. It then provides a list of corrective actions to improve safety progressively. The lift should be audited against a checklist of 74 items. In the KONE brand environment, this cheklist is reffered to as The Safety Listing.

A page of the ELA document listing the risk assessment results.



3.3.6 Risk and solutions illustrated by the ELA – ZACK drawings

SNEL risks as included in the EN 81-80, illustrated by Zack.

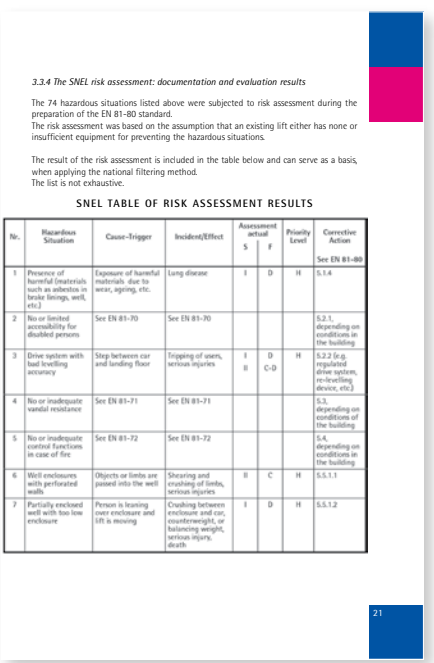
1 Presence of harmful materials

Eliminate any asbestos in the braking system,
in the well enclosure and all interfaces lift/building (well, machine room)

2 No or limited accessibility for disabled persons

Stop controls on landings and inside the car to be well positioned or/and modified to achieve good visibility and easy access by disabled. High degree of precision to be achieved in the stopping accuracy

31



3.3.4 The SNEL risk assessment: documentation and evaluation results

The 74 hazardous situations listed above were subjected to risk assessment during the preparation of the EN 81-80 standard.
The risk assessment was based on the assumption that an existing lift either has none or insufficient equipment for preventing the hazardous situations.

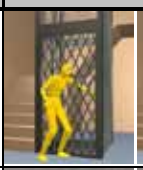
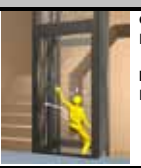
The result of the risk assessment is included in the table below and can serve as a basis, when applying the national filtering method.
The list is not exhaustive.

SNEL TABLE OF RISK ASSESSMENT RESULTS

Nr.	Hazardous Situation	Cause–Trigger	Incident/Effect	Assessment actual S	F	Priority Level	Corrective Action See EN 81-80
1	Presence of harmful (materials such as asbestos in brake linings, well, etc.)	Exposure of harmful materials due to wear, ageing, etc.	Lung disease	I	D	H	5.1.4
2	No or limited accessibility for disabled persons	See EN 81-70	See EN 81-70				5.2.1, depending on conditions in the building
3	Drive system with bad levelling accuracy	Step between car and landing floor	Tripping of users, serious injuries	I II	D C-D	H	5.2.2 (e.g. regulated drive system, re-levelling device, etc.)
4	No or inadequate vandal resistance	See EN 81-71	See EN 81-71				5.3, depending on conditions of the building
5	No or inadequate control functions in case of fire	See EN 81-72	See EN 81-72				5.4, depending on conditions in the building
6	Well enclosures with perforated walls	Objects or limbs are passed into the well	Shearing and crushing of limbs, serious injuries	II	C	H	5.5.1.1
7	Partially enclosed well with too low enclosure	Person is leaning over enclosure and lift is moving	Crushing between enclosure and car, counterweight, or balancing weight, serious injury, death	I	D	H	5.5.1.2

21

Explanations for Hazardous situation

EN81-80 N°	EN81-80 Priority	Risk location	Hazardous situations	Causes and possible consequences
33	High	**User** at the landing	Well enclosure with perforate walls near door locks	  **Cause(s):** Persons unlock and open a door **Possible consequence(s):** Person falls into the well, serious injury or death
34	High	**User** at the landing	No automatic closing device on sliding doors	  **Cause(s):** Door remains open after emergency unlocking or when car leaves the floor due to creeping **Possible consequence(s):** Person falls into well, serious injury or death
35	Medium	**User** at the landing	Inadequate link between panels of landing doors	 **Cause(s):** Mechanical link fails, one panel can be manualy open when the car is not there **Possible consequence(s):** Shearing or falling of persons, fatal or serious injuries
36	Medium	**User** at the landing	Inadequate fire resistance of landing doors	 **Cause(s):** Fire in front of landing door is spreading into well and to next floor **Possible consequence(s):** Persons in upper floors killed by fire and smoke

Expample of the exsiting Safety Listing -page from the KONE Care for LIfe -report

Design Brief

On 3 October, 2008 in the first meeting in Kone headquarters at Keilasatama, Global Marketing Manager Kaisa Pekkala introduced the source material to me. The checklist of EN-81-80 Hazardous Situations in the existing Care For Life -report were illustrated by 3D-modellings and placed to a graph showing the pictures in approximately 40mm x 40mm in size. Based on discussions with Mrs. Pekkala and sight survey, we agreed that the style used in the existing pictures was not only visually out of date but also conflicting with the message they were supposed to be sending. Another issue was that though they appeared to be informative, the main point of the situation wasnt easily conveyed bythe pictures. Due to all the visual noise in the pictures there seemed to be, infact, too much information in one picture.

In this meeting, I did my best to ask for background information and form an insight, on what type of a re-design the client was actually looking for. I tried to clarify the character of the Care for Life– brand and how it should look like. Since I found the existing document presenting the pictures to be illegible and difficult to approach, as well as visually unfinished, I suggested Mrs. Pekkala that it would be good to expand the facelift of the pictures to the whole layout of the Safety Listing -document. Pekkala supported the idea happily. Later the laoyout of the Safety Listing expanded to the lay-out of the whole report document.

Initial timetable was set so that the illustrations would be ready at the beginning of December 2008 and the whole lay-out in the beginning of 2009. The new pictures were to be sent out to the **front lines** *(*different representatives of KONE people world wide) for testing and to get feedback about their understandability in an international context. The feedback was to be gathered from the frontlines by the end of December, so that bossible changes could be made in time for the Deadline of the new layout on 19.1.2009

DESIGN TASKS

- Re-illustration of the 74 EN-80-81 Safety Hazard – illustrations presented in the Safety Listing.

- Representing the brand values of KONE Care For Life in all visual contexts.

- Freshening and updating the look and feel of the Safety Listing as well as clarify the visual presentation of the whole document

- Improving the usability of the document with re-designed layout and information graphics.

- Helping KONE create a uniform and personalized way of presenting information visually in a credible and user-friendly way targeted to international markets.

PROJECT PLANNING & PROGRESS

time line

OCOTBER 08

3rd October Brief

Introduction of the EN 81-81Safety Hazards source material.

17th October
First ideation presetation

The pictogram as a con-sept, Going through all the previous 74 Safety Hazards pictures to clarify the message.

29th October
1st. Feedback

from the team on the first 10 sketches

backround study, research, understandin the requirements

NOVEMBER 08

17th November
2nd. Feedback
From the evaluated 15 sketches.

28th November
ReBrief:

The redesign spreads to the visual layout of the Care for Life Equipment Assessment

New Scedule for the upcoming design tasks:

- 12 General pictograms to identify surveylocation
- Safety Listing
- Equipment Condition Assessment –layout

DECEMBER 08

5th December
74 Safety Icons DL

Ready for testing round

15th December
Layout Meeting

Going through the actual content of the Equipment Conditioon Assessment

19th December
1st. Layout sketches for commenting

22nd December
12 General pictograms ready

design, evaluation, impleamentation

JANUARY 09

16th January
Layout Workshop

Usability Team analysis
My analysis

29th January
Draft DL
presenting the Draft
Cfl- ECA to the frontlines

1.st. Feedback on the
pictograms from frontlines

naming the problem,
design,
evaluation

FEBRUARY 09

testing/ Feedback gathering
from the frontlines

27th February
Final Feedback
from the frontlines

testing

MARCH 09

last corrections
evaluation of the layout

corrections
evaluation
finishing

APRIL 09

8th April
Seminar

Information Design

Information Design

WHY DOES CARE FOR LIFE NEED INFORMATION DESIGN?

Information Design is the skill and practice of preparing information so people can use it with efficiency and effectiveness.[1] The information designer has been described as a transformer of information – whether of raw data, a set of actions, or a process – into a visual model capable of revealing the essence in terms which a particular audience can grasp easily. If the information does not reach the audience, it becomes worthless.

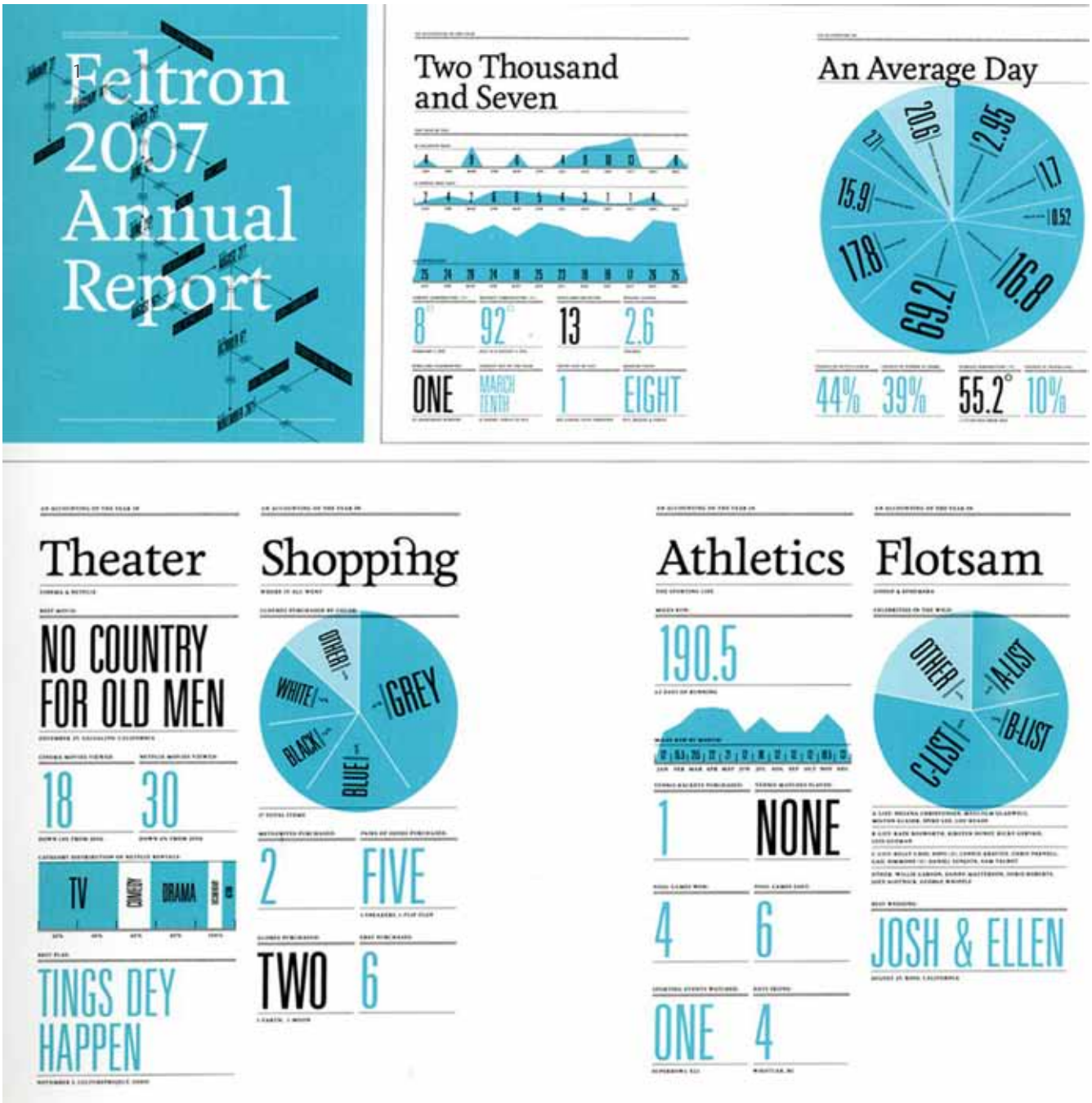
> Information design in its widest sense, is about the selection, organization and presentation of information to a given audience.[1]

After getting to know the subject, it soon became clear to me that the biggest weaknesses of the old Kone Care for Life- material layed here. The information the report was supposed to provide remained undelivered to the so called sivilian because it was lacking proper information design. As the brand values of Care for Life are performance, accessibility, safety, aesthetics and eco-efficiency, good and clear communication should be the core design drivers in everything Kone Care For Life does and sends out to the market. A more detailed analysis of the actual report layout is presented further in this book.

Peter Wildburg and Michale Burke claim in their book ***Information Graphics*** that Information design as a discipline has efficient communication of information as its primary task, and this implies a responsibility that the content is both accurate and unbiased in its presentation. This is a complex issue and no correct answer always exists, since, signs can be represented visually in various ways: realistically or schematically, pictorially, scientifically, as marks, abstractly or as signals (traffic signs). Often in information design, the source content is vast and the user extracts only what is relevant for him or her. This is also the challenging part for the designer. How can you know what is relevant for the user? How much does the user know already? These were question that arouse many times during the design process of the new Safety Icons. People often tend to fall in love with the information they have produced and not always remember, what is neccessary and what is the level of the users prior knowledge and understanding of the subject matter. Among other things, this is one of the most regular causes of so-called 'noise' that tends to come between the message and the reciever, and therefore is

[1] Wildbur & Burke, Themes and Hudson, 1998, 6

[2] Hartmut Brückner, 2004, 10

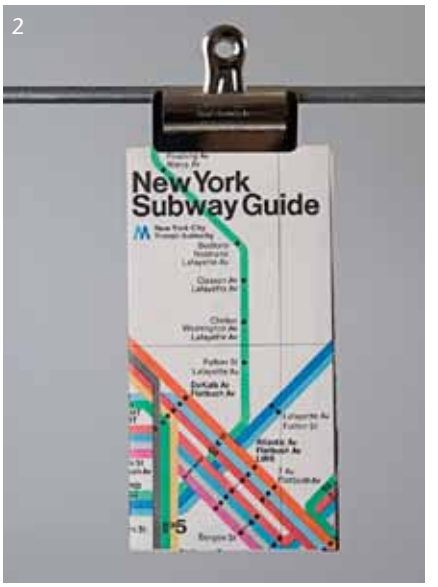


conflicting the understanding. This is why I decided right at the start to try to keep the visual outcome as simple as possible. KISS (Keep It Simple, Stupid) states that design simplicity should be a key goal and that unnecessary complexity should be avoided. Maintaining simplicity is of course more complex in practise, which I also had to face many times during the actual design process.

1.Annual Report 2007 by Feltron; Bar charts, area charts and pie charts collaborate to fill in the textures and experiences of a complex and diverse life, based on personal experiences of New York,

Dataflow, 2007


1

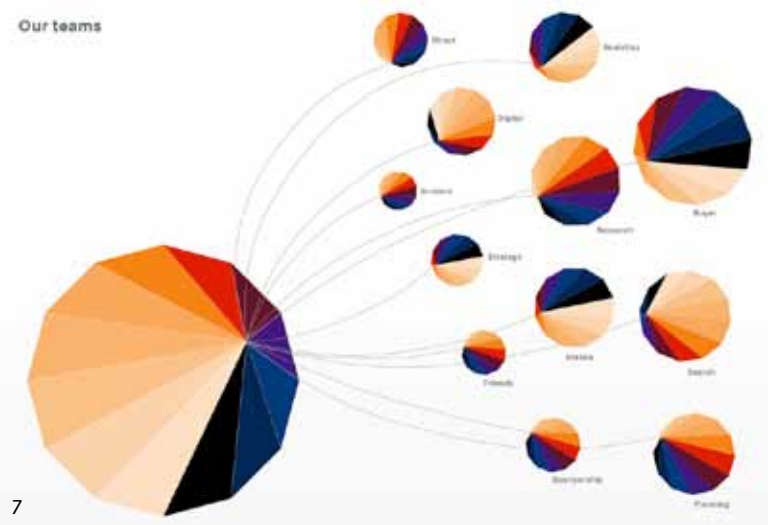

New York
Subway Guide
2

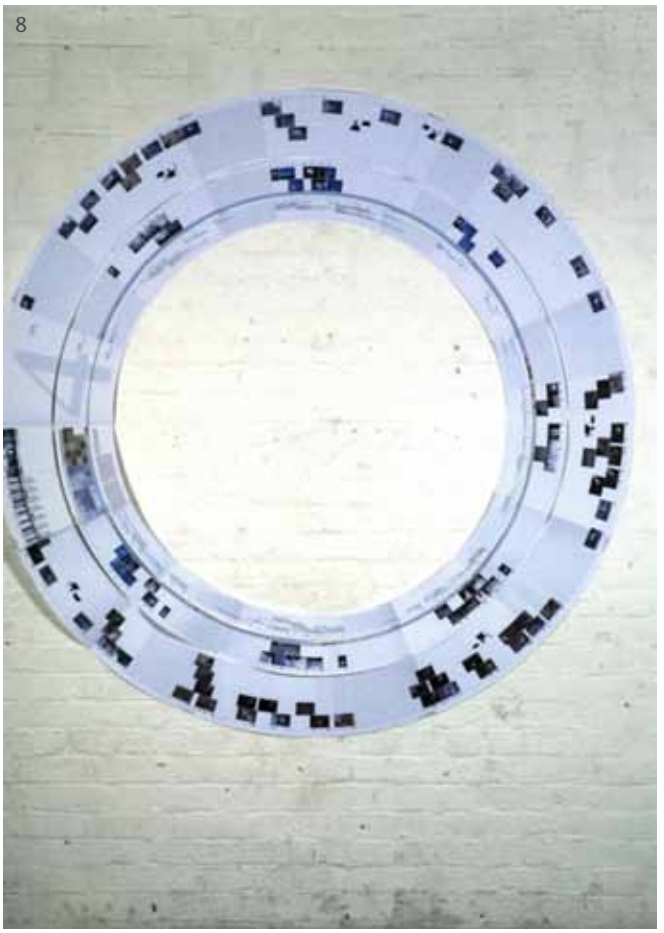

Manhattan
3

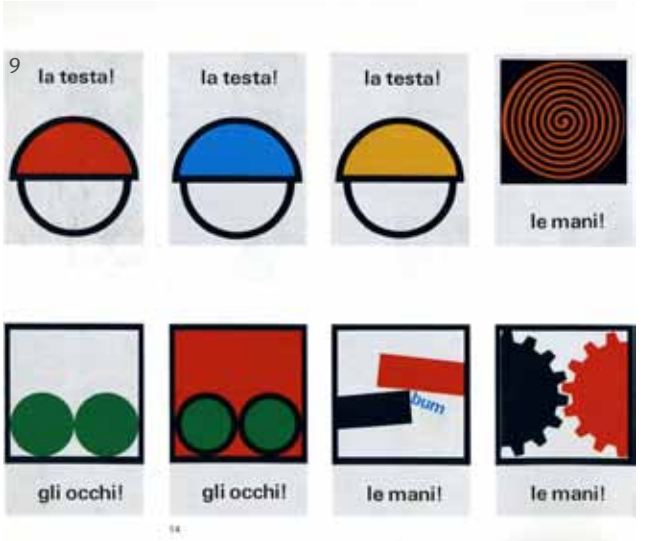

4

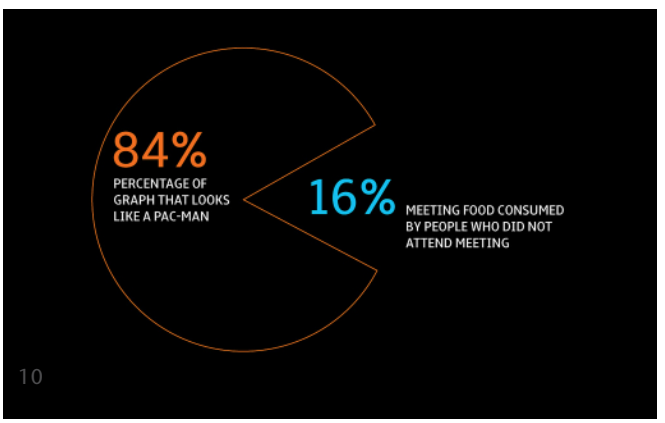

5


New
England
Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont
6


Our teams
7







INSPIRATIONAL VISUAL INFORMATION DESIGN:

1.Hommes/ Femmes annual report diagrams by Valentin Adam, www.spcz.net, 2009

2-3. New York Subway guide, www.flickr.com, 2009

4. Identification labels, Kasaa, www.flickr.com, 2009

5. Map installation, www.flickr.com, 2009

6. Poster presenting New England, Mark Weaver, www.flickr.com

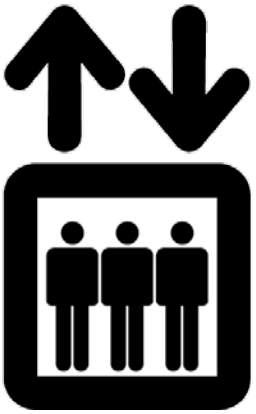
7. Illutstration, DixonBaxi, www.flickr.com, 2009

8. Weather map of every day of the year, dataflow, 2008

9. Posters for prevention of accidents in factories by Eugenio Carmi

10 personal work, designer unknown, www.flickr.com

The greatest benefit of good information design is that it makes something relatively boring or not interesting seem actually very interesting and approachable. Good information design and infromation graphics can also perform as functional illustration, but should never lean on only aesthetical values.



ABOUT PICTOGRAMS

Pictograms are modern signposts.
Their job is to pass on subject matter
and information unambiguously,
quickly and very strikingly.

A pictogram performs many functions:
it can warn, guide, report conditions,
name or classify.[2]

A pictogram is an image created by people for the purpose of quick and clear communication of language or words. In order to draw attention to something, they are commonly used in multicultural spaces.[1]

It is good to keep in mind that pictograms always function in a specific context, and that is why they are always dependent on their surroundings, the objects that they are placed on, as well as other signs. Different circumstances can lead to a single sign beinginterpreted in a variety of ways. For example, if you see a sign of a mobile phone in the train, it means that you are able to charge the battery of your mobile phone, when on the other hand, in almost any other situation, it would imply that you can use your phone in the designated area. Signs rely on conventions, so called general agreements of certain things symbolizing a fixed meaning.

Communicating complex facts with pictograms may not always be easier than communicating them with words, but when done properly, pictograms are a fast and striking, more compact and effective way of sending a message.[3] Like Neurath said earlier: Making an informational picture like this is a more responsible task than just writing explanatory text, because the effect of the pictorial representation is more consistent and will last longer.

[1] Abdullah & Hybner, 2004, xx
[2] Bliz, 2007, 36
[3] Turfe, 1983

WC icons communicating with picture, text and braille.

www.flickr.com

Mandatory signs used to communicate safety regulations. A blue backround used in pictorams are conventional for mandatory and guiding signs.

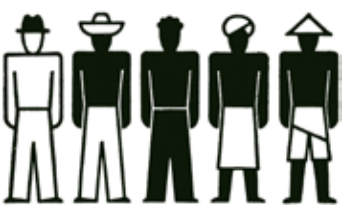
www.schoolshealthandsafety.co.uk

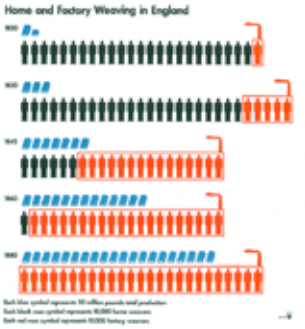
BRIEF HISTORY OF SIGNS & SYMBOLS

In the strictest sense, pictograms are a modern invention, but visual instructions and a particular branch of pictorial signs have expanded throughout the course of human history. It is thought that the first written symbols were pictorial representations of objects. The earliest known writing systems are thought to have originated in the Middle Eastern civilizations of Mesopotamia (cuneiform) and Egypt (hieroglyphs) over five thousand years ago. Early glyphs from another ancient people, the Maya of Central America (whose civilization flourished from 300 BC before disappearing mysteriously in the 16th Century AD) were based on sophisticated written calenderial system.[1] The Asian symbols used for communication, for example Chinese characters, can draw a more or less continuous line of cultural evolution back to the Stone Age. The visual forms of chinese communication have scarcely changed right through to the present day – making Chinese the longest continuously used language system of symbols.[2]

WHAT IS ISOTYPE?

The Austrian philosopher and sociologist Otto Neurath (1882-1945) is often considered as the father of pictorial signs. His aim was to create a visual system, that would present complex facts of the society and statistic information in a way that everyone, even the illiterate, would understand it. In other words, this meant an international sign language. ISOTYPE consists of the words International System Of Typographic Picture Education.[3]





1.

1. ISOTYPE Workers by Otto Neurath, www.visualdata.workpress.com

2. Mapping with ISOTYPE; Home and Factory Weaving in England.

http://isotypenl.files.wordpress.com/2008/09/isotype-weaving1.jpg

Neurath had a dream of unifying nations and equality of teaching and learning through pictorial signs. In his book International Picture Language, Neurath explains the use of pictorial language and tells what the signs should be like to succeed in their teaching.The visual language should be as simple as possible: At first glance, the viewer should recognize the most relevant point. At the second glance, the point that is specifying the message, and at the third glance, the details.

[1] Abdullah,Hybner, 2006, xx
[2] Abdullah,Hybner, 2006, xx
[3] Kiuru, 2007, 28
[4] Neurath 1980, 15-33

If a fourth glance still reveals something new, there is too much information in one picture, which makes the picture bad. The pictures should be attractive but also simple and informative, so that they work alone without written text and explanation. At the same time they should be able to be laid out on the same line so that the viewer is able to read them without getting tired. Making an informational picture like this is a more responsible task than just writing explanatory text, because the effect of the pictorial representation is more consistent and will last longer.

The idea of ISOTYPE sprang up already in the 1920's. Altough ISOTYPE didn't conquer the world or unify nations, it created a foundation for pictograms and in a way it still lives and evolves all the time. ISOTYPE has affected and inspired designers when new ways of using pictograms have been created in everyday in the modern society. An international pictorial language may not be ready to take over spoken and written languages any time soon in the future, but in small communities they can create surprising ways of communication. One example of this are smileys which are used in chat programs and in sms messages to communicate facial expressions and feelings quickly and effectively.

http://www.underconsideration.com/random/maven_symbol_signs.jpg

THE MODERN TIMES

The 1950´s introduced a whole new type of demand for instructing and guiding people when the commercial aviation industry started to develop and created airports. A totally new need for pictorial instructions evolved when people started to travel between countries and from station to station. Propably the best known informational sign system for this is Symbol Signs, which was created in co-operation with AIGA (American Instituition of Graphic Arts) and the U.S Department of Transportation. This was also when first pensions, hotels and restaurants started to appear. To inform all these actions there was a need for signs to explain and guide voyagers. These signs were used to explain for example what different services were provided in different places. The Michelin Hotel Guide was one of the first institutions to use pictorial signs to demonstrate these facts. Later other guiding publications adopted this method because it provided a possibility to present information effectively and clearly in a small space.[1]

Lufthansa 737 Safety Chart:
Lufthansa ´s safety chart uses storyboard techniques to show a sequence of events and avoids captioning, which would require translation into number of languages . Having no text required very care ful planning, use of several colours and public testing to avoid ambiqulty.

Infrormation Graphics, 2007

[1] Mijksenaar, 1997, 21

Case Study

DÜSSELDORF INTERNATIONAL AIRPORT

Icons substitute languages, where different cultures confront. Because flying is the most effective and fastest way to travel long distansces and between continents,intercontinentally, airports have to serve people from different language backgrounds efficiently. For majority of voyagers, the navigating oin airports is easy due to pictograms and other pictorial representations. Still, history has seen some exceptions in this matter: The Amsterdam Shipol airport chose not to use pictograms at all as informational elements. Pictograms were interpreted as information noise. The way-finding system was chosen to support the, at the time so popular, Bauhaus values. All the information was written in lowercase Dutch and English. After some time, the way-finding system was re-designed and pictograms replaced the written signs.[1]

An even more serious case happened in 1996 in Dusseldorf International Airport when the worst airport fire in German history occurred on April 11. As many as 18 people were killed and 150 injured. Investigations showed that the reason for all these casualties was the obscurity and insufficiency of the used wayfinding system. The wayfinding system was not visible enough and the emergency exits didn't stand out from the thick smoke. People didn't recognize the exit signs from the wayfinding system quickly enough and therefore didn't find the way out after the fire broke in the terminal and acrid, toxic smoke filled the air.[2]

This shows how wayfinding systems and good information design play a significant role in public spaces and in their safety arrangements. In these types of situations, the unaccured signs become the most important elements in ones rescue. It is everyone's benefit that the wayfinding performs seamlessly. One year after the re-design the amount of people asking for help at the info desk had reduced to half compared to before the re-design.[3] The re-design was created by MetaDesign, Germany's largest design firm, thathas developed an international reputation for its process-driven system design.

[1] Mijksenaar 1997, 21-24,
Schipol Airport 2007

[2] Düsseldorf International Airport, 2009

[3] Wildbur & Burke, 1998, 25

Dysselforf International Airport way-finding system

Infromation graphics, 2007

OLYMPIC GAMES, MEXICO 1968

As airports, The Oympic games have made the pictograms a well known way of presenting information. From the 1970´s every Olympic Games have had individually designed pictograms for each sport. (Olympic Games Museum, 2008)The Tokyo Olympic Games in 1964 introduced the first systematic range of pictograms for different sports and services. These were designed by Masaru Katzume and Yoshiro Yamashita. After that came Mexico in 1968, and the designers behind the pictograms as well as the whole visual identity of the games were Lance Wyman together with Manuel Villazon and Mathias Goerlitz. The pictograms used in Mexico continued the praised clear and simple style of Tokyo. The icons had a very high contrast and represented the visual atmosphere of the late 60´s. The Olmpic Games show perfectly, how pictorams and other elements of informational graphic design can be used to create a strong and clear visual identity.The theme was carried out also to all kinds of printed material from postcards and stamps to textiles on promotional items.

”MEXICO 68 sticks in the mind because the originality and cogency of its system of communication converted it into a paradigm of modern graphic and event design. If we define communication as ‘a connection allowing access between persons or places’, then MEXICO 68 communicated supremely. It connected people with people, places with places, and each with the other as logically, elegantly and joyfully as may be possible. Above all, the value of the design was in the concept and construction of a graphic system within which every design element was integrated into a general proposal. The proposal delivered a jolt through the ingenuity of its imagery. Beneath the general proposal, there was a profound aesthetic sensation: contemporary Mexico. The perfectly balanced combination of the general and the subliminal generated a secret and immediate influence: the graphic surprise. The visual publicity contained a language created from provocative images; and yet from one image to another, within the eye of any beholder, anywhere, it produced a state of constant enunciation: ‘This is the Olympics. This is Mexico. This is 1968.” [1]

pictures presenting the visual identity of the Mexico 68 Olympics,

www.fickr.com

http://umlautampersand.files.wordpress.com/2008/06/mexico-681.jpg

Rivas, Sarhandi;
www. eyemagazine.com/ feature


AEREO
$5
MEXICO 68
WYMAN
1968


MEXICO 68


MEXICO 68

The Safety Icons

Starting Point

The previous case studies show how the use of signs and symbols is one of the most popular ways of trying to meet the requirements of communicating accurately and quickly across language and cultural boundaries. Signs and symbols can also be used to create a strong visual identity. I found the simplified style of the Olympic Games also suitable for the Safety Icons, and the whole KONE Care For Life visual world. In order to try to create a more unified style of presenting visual information for KONE Oy, it was natural for me to start developing ideas of new pictures maintaining similar pictogram-like style than in the ones I had made earlier. Trying to keep in mind Neurath's criteria of attractiveness andinformativeness, I started initial sketching and in the first drafts was led to a very strict 1970's style influenced by the Olympic Games pictograms and other work of such artists as Otl Aicher and Lance Wyman.

REQUIREMENTS

As mentioned before, the old pictures were not visually attractive and in many cases they were downright misleading. The client was looking for a visual facelift of the pictures and I wanted to communicate the brand values through them, so I named them as my design drivers. Some requirements were set naturally by the context they would operate in: The format of the printed document was to be standard A4, so this meant the pictures would be presented in a relatively small size. In the old version, the size of the pictures was approximately 40mm x 40mm, but I thought that they could be made slightly bigger to increase their informativeness.

PERFORMANCE

- action, effective way of communicating complex facts in a compressed package,

- easy to irecognize

SAFETY

- not misleading

ACCESSIBILITY

- friendly and easy to approach, usable, functional

- Remembering the tone of voice: guiding, informing, not scaring the customers and not being too aggressive in expression.

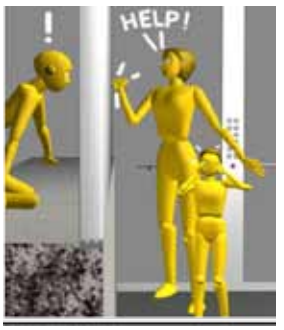
AESTETICS

-Simple and timeless presentation
- A classic style does not go out of date, "aesthetics for everyday living"

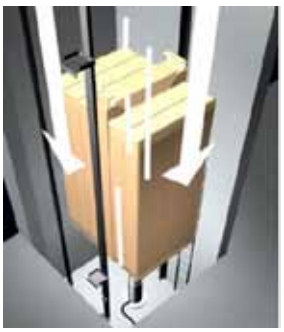
ECO EFFICIENCY

- with a tighter layout, more pictograms can be placed in one page -> reduce the page amount of the total document.

54B



60



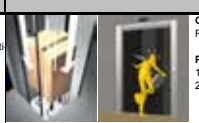
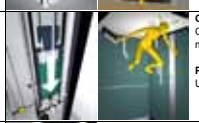
56

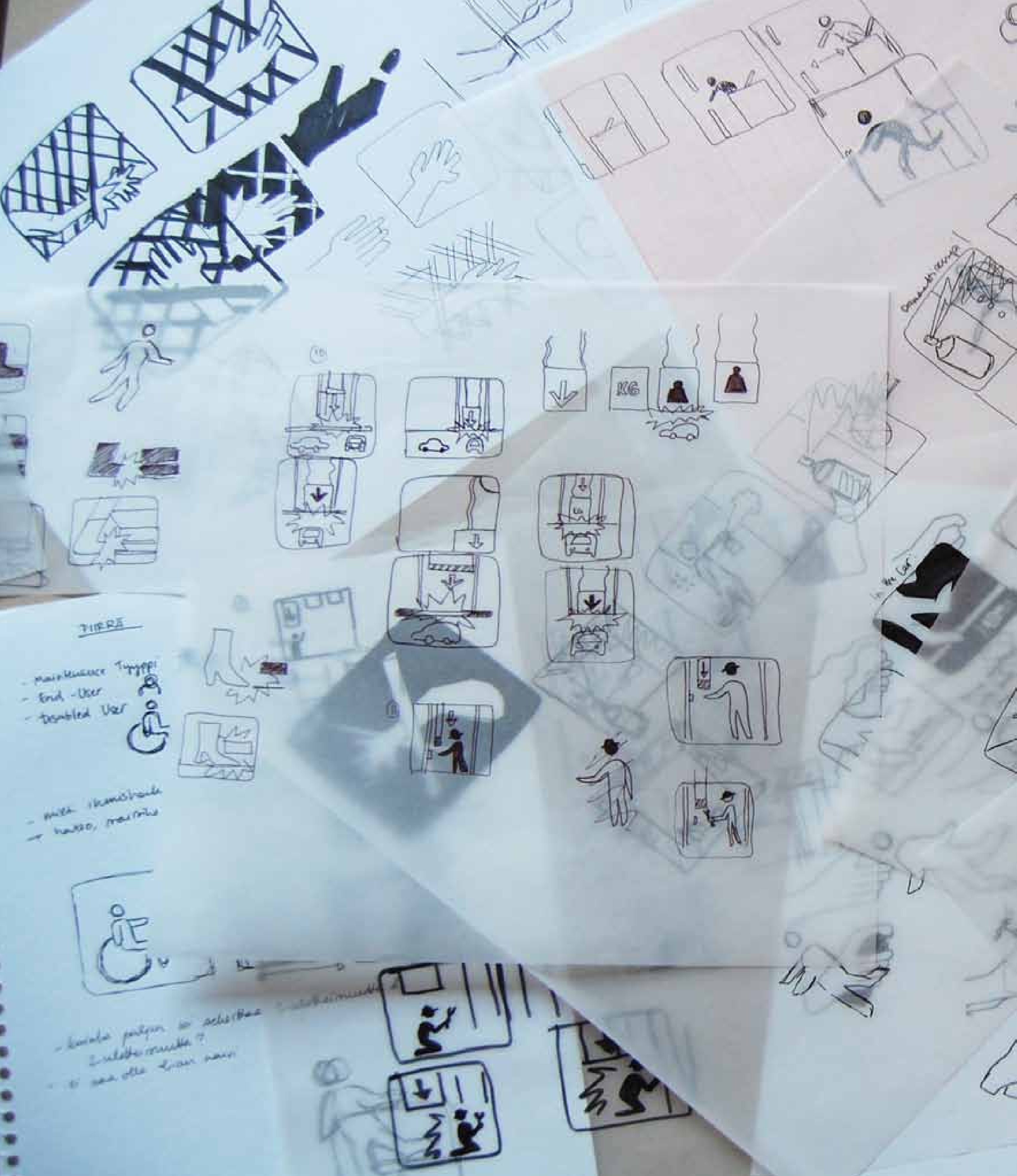
2

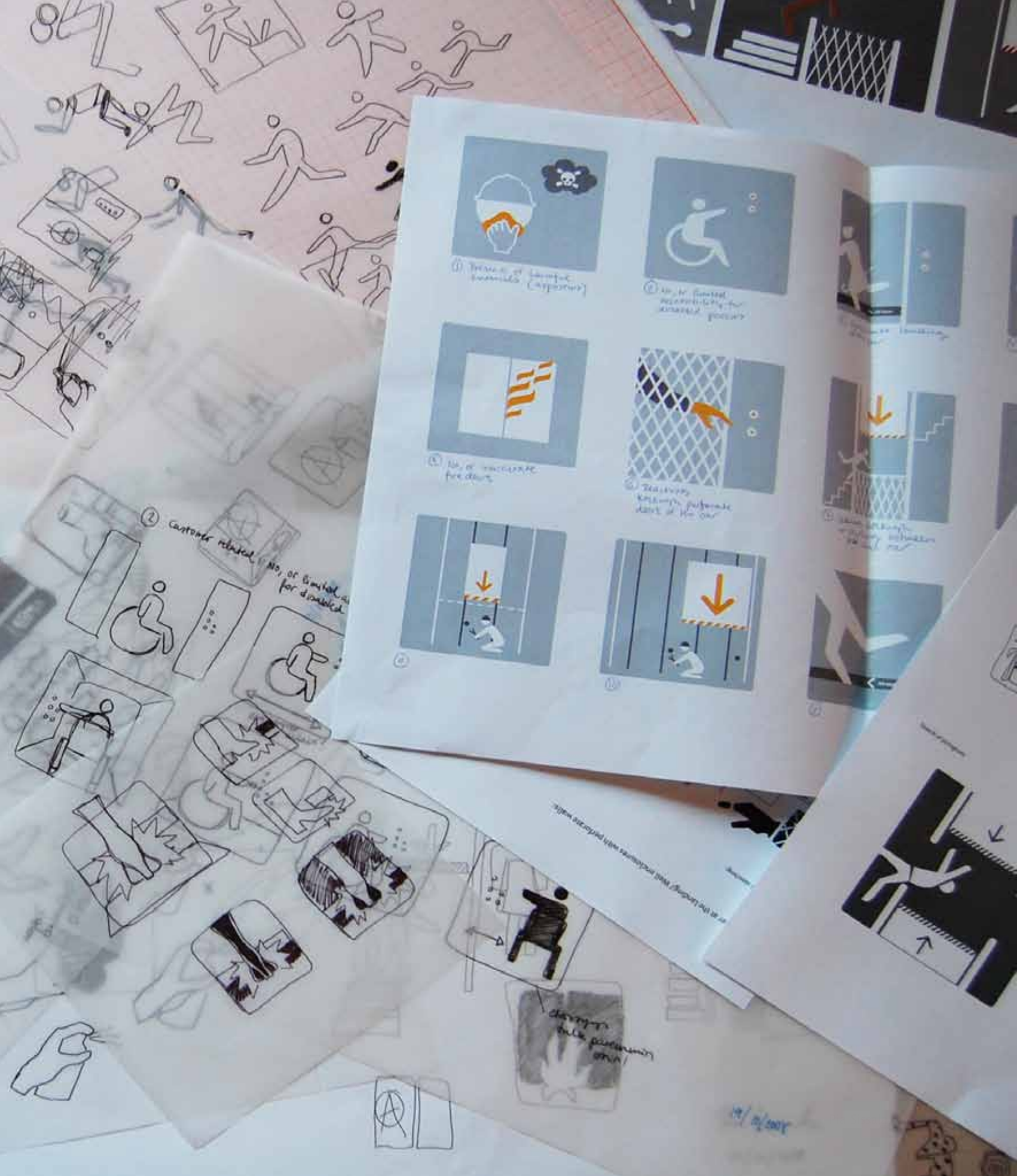
Old Safety Icons:
Some ot the situations had been illustrated with two pictures at a time.

Safety listing: Explanations for Hazardous situation

Address: Siltasaarenkatu 26 B, Helsinki
Lift number: 8492 Manufacturing year: 1960 Survey date: 10.6.2005

EN81-80 N°	EN81-80 Priority	Risk location	Hazardous situations	Causes and possible consequences
54B	High	**User** in the car	Automatic return of the car to the lowest floor level when an electric anti-creep system is used	 **Cause(s):** Failure of suspension, rupture of hydraulic piping, oil leakage, etc. **Possible consequence(s):** 1. Car crushes into pit, persons crushed 2. Car leaves landing with door open and person falls down the well
56	High	**User** in the car	No or inadequate buffers	 **Cause(s):** Car or counterweight/ balancing weight is hitting the buffers due to a failure in the mechanical or electrical system **Possible consequence(s):** Users in car or maintenance persons on car roof crushed, serious injury
60	High	**User** in the car	No or inadequate emergency operation system	 **Cause(s):** Lift breakdown, instructed person tries to rescue trapped users, rescue is delayed, rescue is unsafe **Possible consequence(s):** Panic, claustrophobia, person falling down the well
62	High	**User** in the car	No independent starting contactors	 **Cause(s):** Welding of main contacts, sticking of armature, car is moving with open safety chain **Possible consequence(s):** Person sheared between landing and car door, maintenance person sheared or crushed on car roof or in pit


KG
- End -User



FIRST GENERATION ICONS

INITIAL SKETCHING

Initial sketching involved drawing with a copic pen or a textmarker to avoid too detailed illustration. I also used mind mapping technique to achieve more visual ideas related to one subject. At the start of the process I was very worried about how I would achieve a uniform visual style and consistency throughout all 74 drawings. I thought of different graphic elements from which all the pictures would consist of. What would be the right type of element that I could vary so much that it would be possible to create all the pictures out of this one element? This type of illustration is so neutral and clinical in its look and feel, where was the space for me to give my personality to it?

On October the 15th I had a meeting with the client at KONE Headquarters with an aim to clarify the main point in all the EN 81-80 –checklist pictures. Since I am not an engineer and have limited knowledge of the actual technical details of elevators, this meeting was priceless for me. In this meeting we also agreed that once the pictures were drafted, they would be sent out to the frontlines to be tested for their understandablility.

As mentioned before, one of the problems in the existing pictures was that they actually contained too much information, making it hard to identify the main point of every situation. This fact led me to attack the design at first with a presentation as sipmle as possible. I decided to picture only the necessary things according to the message and play in a more conseptual level. The first draft version of the pictograms were presented with only one color. I thought that I could use color to color code the pictograms due to their hazardous priority defined by EN-81-80.

The first versions of the safety pictograms vere illustrated in a very puritist style using only black and white. On the right first versions of "presense of harmful materials"

After sight survey, I found out that red and gray represented the colors of KONE´s biggest competitor in the elevator market so that coloring was obviously not suitable. The client also thought that the red colour was too dramatic, and reminded me, that they did not want to scare the customer. This was one reason, why for example, " Precense of harmful material" -picture was considered "too deadly" with the skull and bones pictured in it, which ment I had to find another way to communicate the message.

DEVELOPMENT

After finding a suitable theme to use in a picture I moved to Adobe Illustrator to work on a more detailed level. I created a grid divided by the golden section, wehere I started to place the figures and other elements.

Though this minimal style supported the pictogram style I was favouring, it soon became clear that majority of the situations were so complex, that this stringent presentation wasn't informative enough. I thought it would be good to add a contrast colour to highlight the hazardous element in the picture. At first I used gray as backround color due to its neutrality and modern look, and highlighted the hazard with a red colour. Red is commonly used in information graphics to visualize alarming, as well as orange and yellow to indicate different levels of hazard.[1]

On October 29, 2008, I went to the KONE Headquarters to get feedback from the first 10 pictogram sketches. The general visual style was approved for further developing.

[1] Woglter, 1999, 98

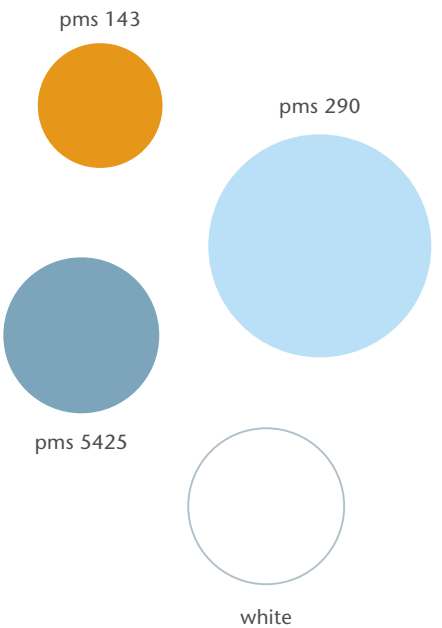
Visual elements

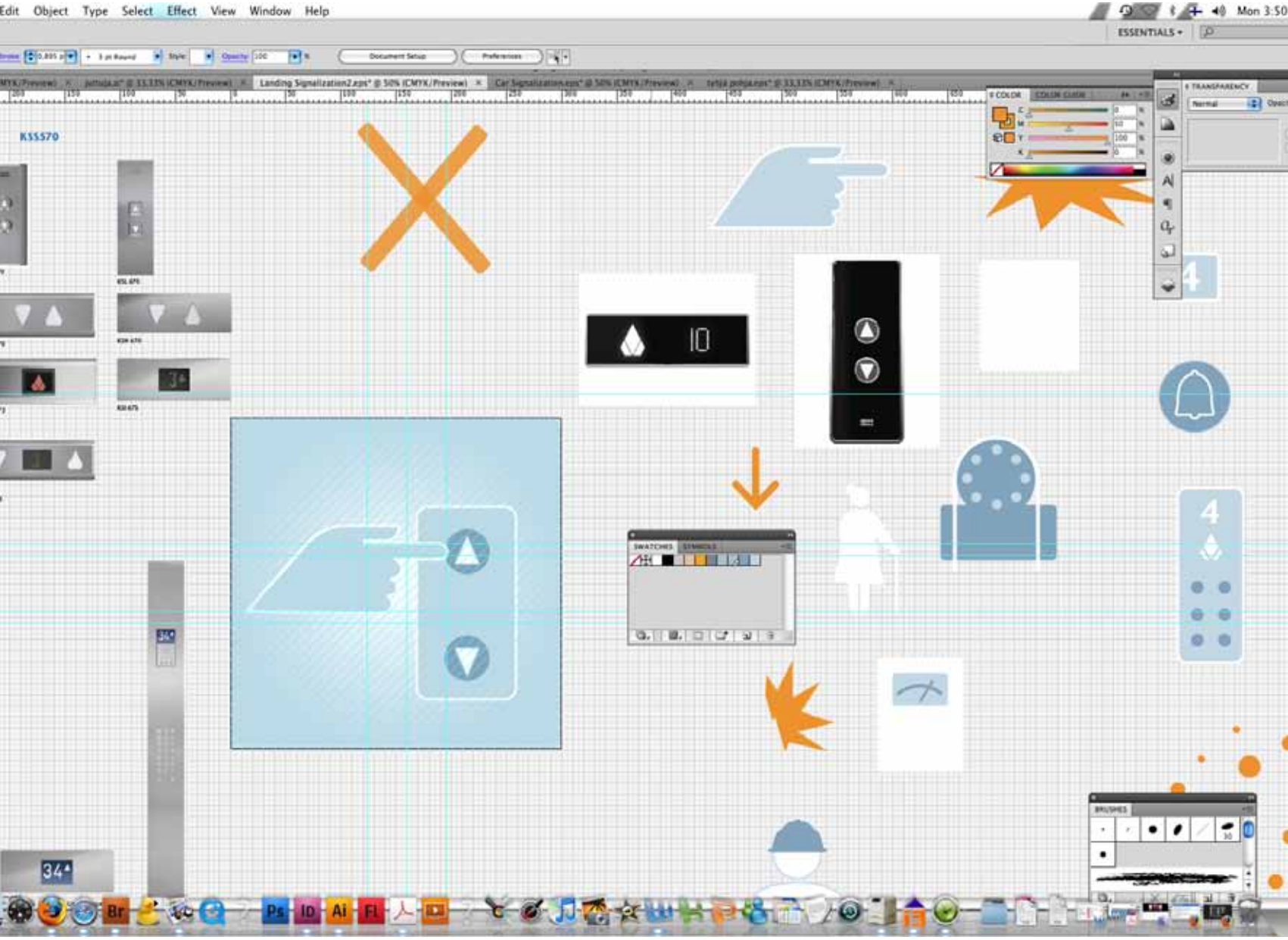
COLOUR

The use of colour plays a significant role in communicating corporate and brand identity. Colours can be linked to brands, making it the brand equity. Good example of this is what Coca-Cola has done for red, and Fazer chocolate for blue. With this adaptation the precise colours have became the 'Coca-Cola red' and the 'Fazer blue'. Very often this most important colour is found from the company or brand logo. The same situation is with KONE. The KONE Blue (pms 300) represents the essence of the KONE Brand, but unlike Fazer, in KONE Brand environment the Kone blue has been restricted in its use only for the logo.

When I turned to the visual guidelines in the KONE Brand Book to find a suitable accent colour that would communicate the hazardousness as well as the KONE identity, I found that there weren't many accent colors available. I would have liked to use blue, but although it would have been easily identified with KONE, it would also have conflicted with the meaning. Blue does not communicate a hazard or a warning, because It is commonly used in way-finding systems or obligatory signs. Finally, I found a suggested orange to do the thing.

The change of the accent colour form red to orange completely changed the feeling in the pictures. The overall look became instantly more friendlier and not so aggressive as in the red version. After finding the right contrast colour, I started feeling that the grey colour on the backround was a little bit stuffy. I also felt that it might be reasonable to add a second tint to add more contrast to the elements in the picture. After another look at the KONE Brand Book and the visual guidelines presented in it, I found a colour scheme that pleased me. The blue found its place as a background colour. From the suggested background colors I chose a more light, blue-like gray (PMS 290) for the background color and cool gray PMS 5425 to function as a contrast color. White color would present the human figure, and orange PMS 143 was chosen to highlight the hazard.





VECTOR GRAPHICS

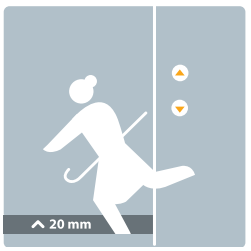
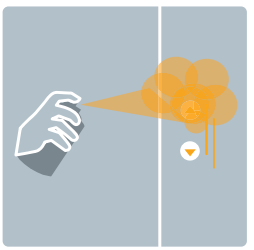
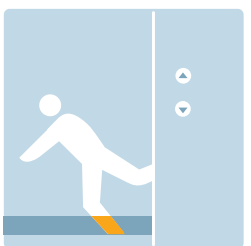
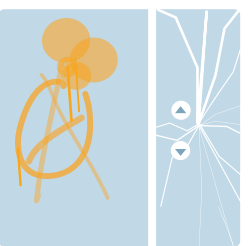
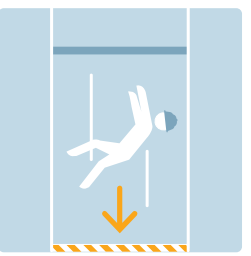
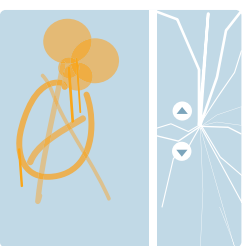
The visual elements that I created for the Icons varied and evaluated through the whole process. I wanted the visual language of elements to be simple and friendly. I started to build the figures and elements based on geometric forms, such as a square, triangle and a circle, since they represent a feeling of modern technology for me.

To avoid a too clinical look I applied round corners to all elements. I wanted the visual elements to be identifiable as elements of actual KONE equipment, so I used KONE marketing material of technical solutions as visual reference material.

Finding the right form the car signalization, COP in illustrator.

Sissala, 2009

SECOND GENERATION ICONS

	1	3	4	15
	Presence of harmcful materials (asbestos) .	**Drive system with bad levelling accuracy** *The doorstep can be more than acceptable 20 mm-> See EN 81-80*	**No or inadequate conrol of vandal resistance**	**Unsafe pit access** *> Failing when entering or leaving the pit*
18.11.2008				
3.12.2008				
13.1.2009				
1.3.2009				

TESTING

After various rounds of developing the illustrations, the 74 Safety Icons were ready on December 5. Although the deadline for the Safety Icons had originally been in December 2008 and the feedback from the country representatives should have been gathered according to the, plan by the beginning of the year 2009, it was´´t until February 27 that I got the final test results. Since I had started developing the new layout of the Equipment Condition Assessment already, we had agreed with the team that we should send out the whole draft version of the Assessment, with the new Icons included, so that the test person could evaluate the pictures in their proper context. Apparently, the first test round had been conducted, contrary to my wishes, with individual pictures. The test round clearly wasn't very well organized in its entirety. The testing should have included simple questions that would have produced constructive feedback. Now some of the feedback was based only on personal opinions like " I liked the old pictures more."

It was not surprising that everyone in the test group wasn't open for new ideas. The client had warned me that there might be a lot of varying opinions about the new designs, but also reminded me that they had made the decision of carrying out the redesign and that they were happy with the work so far.

During the test round, I started to worry weather some pictures were recognizable or not. I had a feeling, that I should have had forced the Care For Life team to actually take me down the elevator shaft to see some of the equipment and machinery that I wasn't familiar with right at the beginning of the project. Now I had had to redraw some of the pictures with just the old "bad" picture as reference material and my own imagination.

The testing was conducted by KONE personnel in Finland, UK, Italy and the US. The opinions varied remarkably according to each country from adaptive and positive to total rejection. As said before, the fact that the client has tested the material within their own company might not give the most objective results of legitmacy and understanding, since the majority of the people working for KONE are familiar with the lift equipment and their technical details. It was clear that the majority of the tested persons were engineers. A picture that didn't represent more than boxes based on blueprints, was cosidered understandable, but pictures presenting more commonly recognized symbols, were considered misleading. Therefore, I continued to show the illustrations around also in my own environment as much as I could.

CONCLUTIONS

After the second test round, I received good instructions for making corrections. The team had clearly gone them through in advance and clarified now accurate correction tasks such as “Put a cross above the button”. Two main points arouse above else: The customer wanted the illustrations to have more movement, and more “pain” in the exact places where actual hazards occured.

Important things that came up in the feedback: for instance the fact, that the colour orange that I had used to highlight the hazards was to be modified, since people suffering from colourblindness wouldnt be able to see it properly on top on the blue/gray background. This was a significant point, since 8% of all men and 0,4 % of women suffer from colourblindness.[1] In the last version of the Safety Icons I increased the amount of magenta, to make the orange brighter and also added white strokes on elements placed on top of the blue backround.

I found out that I had misunderstood some of the situations in the beginning of the project and therefore I had illustrated them misleadingly in the first place.
Now I also got a chance to ask for more visual reference material
to support the creation of illustrations on topics that I had been ignorant.
Overall this feedback was necessary for me to wake me up from my stubborn love affair with the two-dimensional pictogram-style. Infact, It had been restricting me, and now I saw that in the name of recognition and understandability I had to let go of it . I tried some 3D-elements in the pictures and figured it helped some of the situations radically. Part of the situations became much more understandable when I used a perspective in the viusalisation. In the end I got excited about the subject again, and started an owerall “powdering”: A gradient backg round gave the Icons a new life and a new level of three dimensionality.

[1] Wikipedia, 3/09

EN 81-80 Hazardous Situation 9: Inadequate vertical surface below landing door sills.

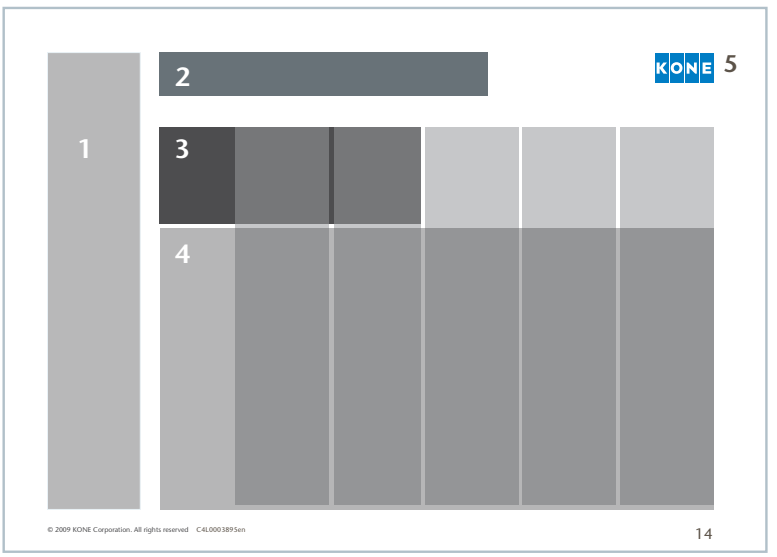
Equipment Condition Assessment

Analysing the old report

I started the re-design by looking closely at the old report and analysing it. In the feedback meeting at KONE Headquarters on December 15, 2008, it turned out that a usability team at KONE had been analyzing the report also. This was good news for me, since I was a little nervous of not being that familliar with the actual content of the report. I was afraid I would stumble on my "graphic designers perspective" and not concentrate on trying to get the intended message sent out as clearly as possible. In a workshop we arranged surrounding the topic, it luckily appeared that my analysis of the existing report was actually the same as the one done by the usability team. This gave me great confidence to start planning the new layout.
A small hinderance was that the customer was doing some editing with the text content, which ment that many parts overwent multiple rounds before finding the final text and the final form. This slowed down my work and was wery frustrating at some points.

INFORMATION HIERARCHY

The biggest issue in the old survey report was that it was completely lacking an information hierachy. The headings were unlogical and it wasn't really clear what information went under which topic. Multiple topics were presented on one page. Smaller problems in the old report layout included things like positioning the company logo in different places on each page, as well as unparsed use of typography. All this jumble caused inconsistency and made it difficult for the reader to follow the survey results.



Sketches of the new layout.
Antti Ahtiluoto, 2009

NEW LAYOUT

I wanted the look of the repot to balance between a clinical, modern look and humanity. In the new layout every survey area got its own individual page. I continued to use the same colours already familiar from the Safety Icons, reducing the master colours to white and blue. After trying out some rough sketches with pen and paper, I was led into a horizontal layout in A4-format. I divided the new basic layout into different information zones:

1 Case Info The left side of the document is for presenting the customer info showing detailed information of the case and the equipment in question. This information is placed on each page individually as a reminder and separated from the main information with a light blue backround, making it easy for the customer to identify their lift equipment.

2 Heading The second zone is for the heading. This means the topic of the survey area presented on each page individually.

3 Caption Under the heading zone is a place for the caption/ introduction.

4 Content The space left inside the margins was dedicated to the actual visualization of the survey results. The general pictogram, are placed her, on site notes and improvement opportunities.

5 Logo The company logo found its logical place in the right upper corner of the documet.

TYPOGRAPHY

ITC Stone Sans and Stone Serif should be used everywhere in corporate design according to the KONE Brand Book, which made it easy for me to draw typographic alingnments. Stone Serif was used for headings, and Stone Sans for sub-headings as well as for body text.

EQUIPMENT CONDITION SUMMARY

The “Executive Summary”, which was an introduction and a summary for the whole document, introducing the rating of the overall condition of the customer’s equipment, looked more like a “small print” of legal text which was a necessary evil. It was easy for the user to skip this because it looked so heavy. A user study showed that the KONE Salesperson,(who was supposed to use this document to present it to the customer) didn’t know how to use it either. I tried to make the rating page as accessible and easy to approach as possible.

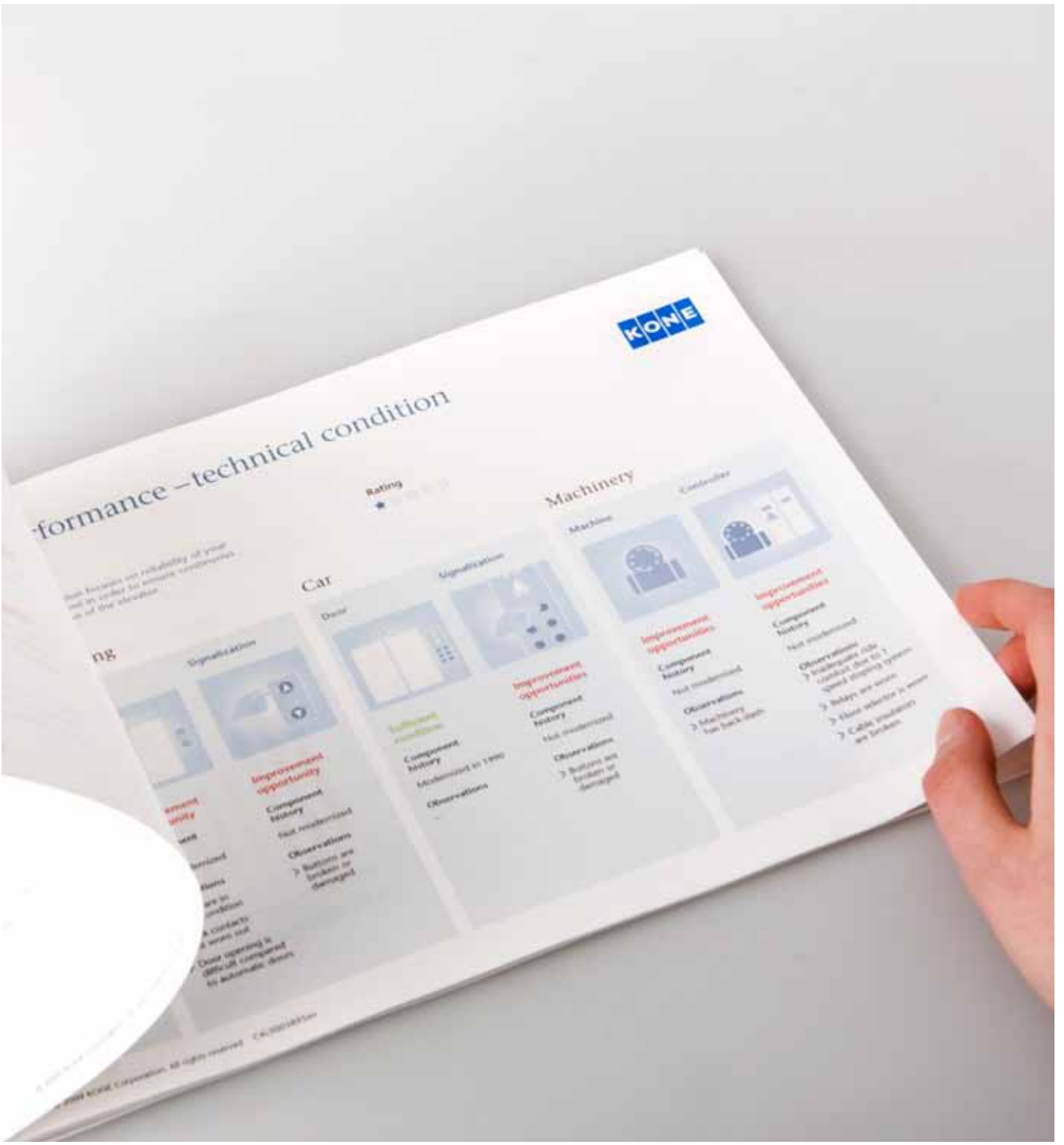
The client insisted on having the information presented in the form of “traffic lights” and star rating. I worked on making the traffic lights clearer in the new layout. Also, more detailed sub-topics with bullet pointed lists were added to present relevant information.

INTRODUCTION

In the new lay-out structure an additional Introduction page was added to the beginning of the document to introduce the document and to describe what was done in the survey. This page was originally named as the “disclaimer”, but was later renamed as “Introduction”.

Close up on Equipment Condition Summary and Introduction pages.

Antti Ahtiluoto, 2009

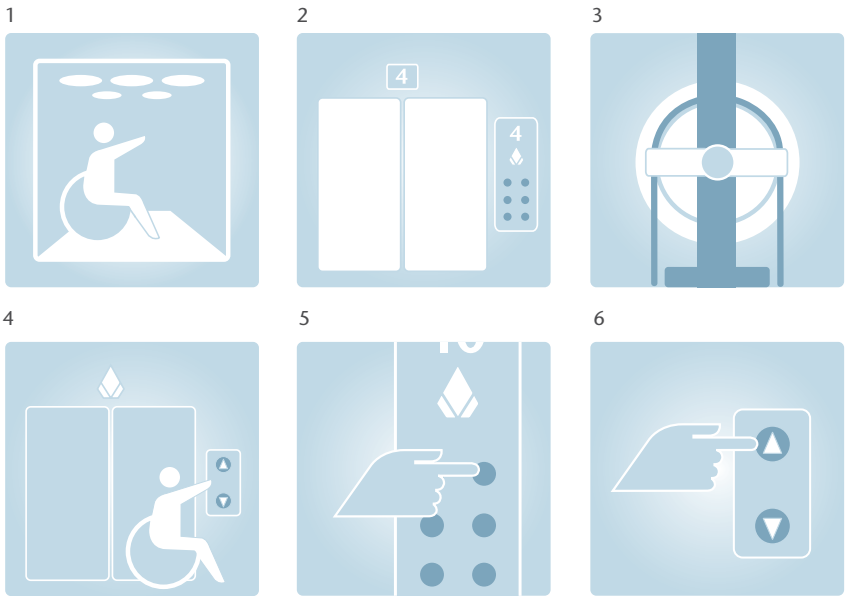


Antti Ahtiluoto, 2009

GENERAL ICONS

After designing the pictograms to demonstrate the EN 81-80 safety hazards, referred to as the Safety Icons, I designed 12 "general icons" to introduce the survey locations to the reader. They make identifying of the risk location easier and illustrate the document. The design was effortless for me, since I had already created the visual concepts of different survey locations during the design process of

1. Car accessibility
2. Landing door
3. Monospace - machine
4. Landing accessibility
5. Car signalization
6. Landing signalization



THE SAFETY LISTING

The Safety Listing is the last part of the Care for Life Equipment Condition Assesment. This part shows what exact safety risks the case elevator has according to the EN 81-80 checklist. It was clear to me from the start that I wanted to get rid of the engineer style of presenting this information. I also wanted to clarify the causes and concequenses more and make the logic more understandable. In the final version of the Safety Listing, the Hazardous Situations are layed in vertical paragraphs. For a long time I tried to keep the listing light with a white backround, but finally figured out that the blue backround boxes gave the listing a better posture. Since I had been using the blue background already to tie the layout together in the other parts of the layout, I found it justifiable here also.

Strengthening
Care For Life
Identity

Buiding Care For Life Visual Look

PREMISES

The first time we discussed about extending the design project to the layout of the Equipment Condition Assessmetn , I tried to do my best to ask the customer, what was the amount of creative freedom I had considering everything else than the illustrations. The Visual Guidelines has defined relatively stricktly the visual outloolook or appearance k of printed marketing material. Practically this means brochures, ads, presnentations and other coustomer facing marketing communications. Since the Equipment Condition Assessment is not a brochure but a report of equipment codition, with promotional intentions facing the same external customers (Since the aim is to get the custome to invest in buy a modernization service). I saw a potential loophole here. There are also some parts, that have not been defined in the Brand Book, such as already earlier mentioned information graphics. I saw an opportunity here. I thought that If I managed to create something suitable, they could be used as building blocks for the future guidelines.

The client said that the basic allignments of the visual guidelines should be respected, as in use of typography and color. But since Care For Life was described as a "special case" in the terms of the client, all else was up to me at this point. At this point I had to become familiar with the ways, how things had been managed with other KONE sub -brands.

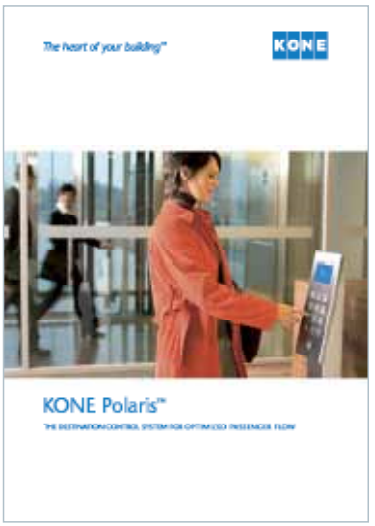
DEFINING IDENTITY HIERARCHY

The sturcture and organization of a corporation has a vital impact on the corporate Identity. It is a significant decision, weather the company wants to communicate itself as only one unit, many cognate units or many individual units. KONE has grown mainly as a result of acquisitions and is now the fourth biggest supplier of Elevators, Escalators and Automatic building doors with global market share of 13%. A KONE's role globally is the role of a challenger. The coherent branding and vsual look is important to strengthen it's global brand and recogniztion. Merging the often strong but local companies have been challenging from the global brand management point of view. KONE devides in to lines of activities: KONE New eguipment business and Service business (maintenance and modernization of Elevators, Escalators and Doors) Elevators and KONE Escalators. Below these branches KONE provides several (technical) solutions and services.

[1&2] Design Management, yrityskuvasta kilpailuvaltti; Liisa Poikolainen, 33-35, 1994

KONE can be seen as a corporation with a monolithic identity hierarchy with few exceptions. Among KONE Valio has the same identity structure: Butter, cream and milk, have all the same prefix: Valio. Also all Kone products have the KONE prefix. Yet Oivariini and Polar (product family) are trademarks that have been built as brands, where Valio is visible. [1] Comparatively KONE has seen some special cases. For example KONE Monospace and EcoDisk have both been separated as own brands by own brand logos. There are some problems in this structure: When both the company logo and the brand name are in use, some confusion may occur: What is the main role: the brand or the Company? This has been a central question that I have faced multiple times during this project, having a negative impact on my design process.

After interviewing sone KONE personalities, It came clear that due to the vide product range, the company tried to move towards a totally monolithic identity, to achieve a more uniform brand repertory globally. KONE can also seen as the main brand because tens or hundreds of subbrands would lead to very scattered communication especially for a company with relatively low global market share. One way to streghten the KONE brand is that all products are named and branded with two word name always havin KONE as the main brand and product/service dedicated second brand name (i.e KONE MonoSpace®). For the same reason no subrand dedicated graphical logos are allowed to compete with KONE logo.
 The basic alignment at the moment is that all trademarks and subrands share the same spelling:
KONE MonoSpace® , KONE MaxiSpace™ and KONE InnoTrack™ . All words use Stone Sans as typeface and no individual logos are used.



Tarditional KONE Marketing material. The spelling of the product name is always the same with KONE prefix.

Kone Medialibrary, 2009

CONSPET FOR A LOGO

HOW TO DESIGN A LOGO WHEN LOGOS ARE NOT ALLOWED?

Originally I had had the idea of creating a logo for KONE Care For Life for a long time. At first the idea of early sub-brands that had had individual logos was couraging me to design one logo more to the already partly messy brand environment. After interwieving KONE personalities and getting to know the situation better, I gave up the idea of a totally individual logo. Nevertheless, I decided to respect the alignment of uniform spelling and the use of Stone Sans, and concentrated on playing within the given restrictions.

Consepts for individual brand logotype:

1

Care For Life™

2

Care For Life™

The consept for an individua KONE Care For Life logo was based on the thought of 'care' . I customised the CareForLife-typeface by modifying an existing typeface, Museo.

- 'Others repair their machinery, we care for them.'

- Care is a soft and feminine element, and life is strong.

To support this philosophy I used a light verison of the typeface, and semibold for the rest of the name.

I desided to try and make the brand name look more like a trademark with some typographical details.

consepts for the identifieable spelling:

1

KONE Care For Life™

2

KONE *Care For Life*™

EQUIPMENT CONDITION ASSESSMENT

Final consept using
ITC Stone Sans Medium and
ITC Stone Sans Semibold:

KONE Care For Life™

KONE Care For Life

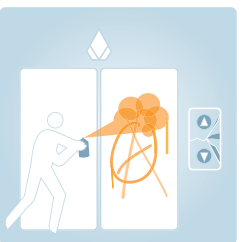
EQUIPMENT CONDITION ASSESSMENT

Performance
Eco–Efficiency
Accessibility
Aesthetics
Safety

KONE Care For Life

Attachments

KONE CARE FOR LIFE
Safety Icons

1	2	3	4	5
Presence of harmcful materials (such as asbestos in brake linings, well etc.)	**No or limited accessibility for disabled persons**	**Drive system with bad levelling accuracy**	**No or inadequate conrol of vandal resistance**	**No or inadequate conrol functions in case of fire**
Exposure of harmful matrials due to wear, ageing, etc.	-	*The doorstep can be more than acceptable 20 mm-> See EN 81-80*	*See EN 81-80*	*See EN 81-80*
				
high	high	medium	customer related	high
› *Falling down the well*	› *See EN 80-71*	› *When the lift is stopping inaccu-rately, there is a risk that passangers fall down when entering or leaving the car.*	› *See EN 80-71*	› *See EN 80-71*

6

Well enclosures with perforated walls

Objects or limbs are passed in the well

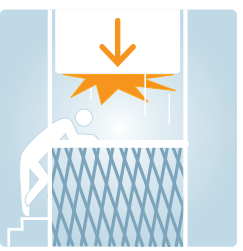
high

Shearing and crushing of limbs, serious injuries

7

Partially enclosed well with too low enclosure

Person is leaning over enclosure and lift is moving



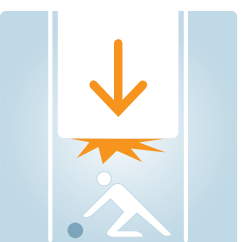
high

Crushing between enclosure and car, counterweight, or balancing wieght, serious injury,death

8

Inadequate locking devices and electric safety devices on access doors to well and pit

Non authorised persons are entering the pit/well



high

Persons are crushed by moving parts, serious injuries death

9

Inadequate vertical surface below landing door sills

See EN 81-80

high

Free fall of counterweight/ balancing weight due to broken suspension

10

Counterweight/ balancing weight without safety gear in case of accessible spaces below well

See EN 81-80

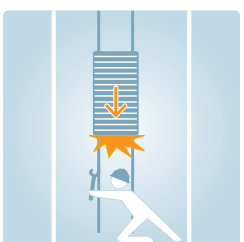
low

Pit floor collapsed and persons in spaces below well injured or killed

11

No or inadequate partition of counter-weight/ balancing wieght travel path

Maintenance/inspection person in the pit is walk-ing into this travel path when lift is moving



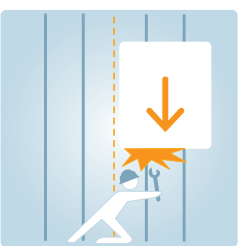
low

Falling down the well

12

No or inadequate pit screen for several lifts in the same well

During maintenance/ inspection on one lift adjacent is moving



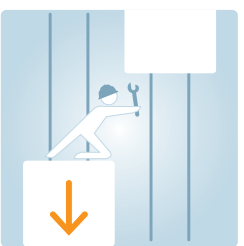
high

See EN 80-71

13

No or inadequate partition for several lifts in the same well

During maintenance/ inspection on one lift adjacent is moving



medium

When the lift is stopping inaccu-rately, there is a risk that passangers fall down when entering or leaving the car.

14A

Insufficient safety spaces in pit

The car is overrunning the upmost or the lowest floor with a person in the pit

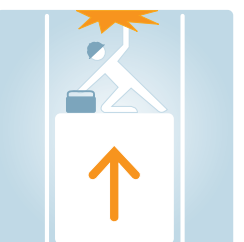
high

See EN 80-71

14B

Insufficient safety spaces in the headroom

The car is overrunning the upmost or the lowest floor with a person in the car roof



high

See EN 80-71

15

Unsafe pit access

Failing when entering or leaving the pit

low

Serious injuries

16

No or inadequate stopping devices in the pit or in the pulley room

Uncontrolled move-ments

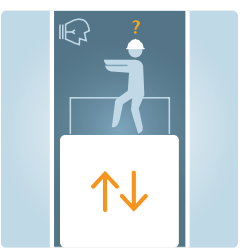
high

Persons in car crushed Serious injury or death

17

No or inadequate well lightning

Maintenance/ inspection person is tripping pr gets in contact with moving parts



medium

Falling and crushing, serious injury or death

18

No alarm system in pit and on car roof

Person trapped or injured in the pit or in the car

customer related

Rescue and treat-ment of injury not in time, serious injury or death

19

No or inadequate means of access to machine and pulley room

Authorised person is entering or leaving the machine and pulley room

high

Falling, serious injury

20

Slippery floor in machine or pulley room

Authorised person is slipping and falling

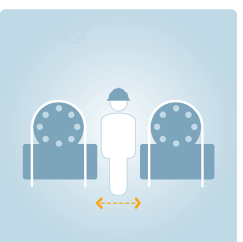
high

- *Contact with obstacles or moving parts, serious injury*

21

Insufficient clearances in machine room

Authorised person moving or working, unexpected movement of equipment



high

- *Contact with obstacles or moving parts, serious injury*

22

No or inadequate protection on different levels in machine room

Authorised person is moving in the machine room

high

- *Falling, serious injury*

23

Inadequate lighting in machine and pulley room

Authorised person is moving

high

- *Tripping, contact with moving parts or electric shock*

24

Inadequate means of handling of equipment

Moving of heavy lift equipment, failure of supporting means

low

- *Crushing of maintenance persons, serious injury*

25

Perforated landing and car doors

Limbs are passed through openings

high

- *Shearing and crushing of limbs, serious injury*

26

inadequate design of landing door fixings

Person pushes the door, door collapses

high

- *Falling into the well, , serious injury or death*

27

inadequate glass in doors

Glass is broken by impact, person passes limbs through opening

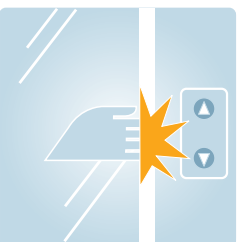
high

- *Falling into the well, shearing of limbs, serious injury or death*

28

No or inadequate protection against dragging of fingers on sliding doors with glass

Person (i.e child) touches glass and door start to move



high

- *Release of oil to maintenance person, pollution*

29

No or inadequate lighting on landing

Users entering of leaving the lift

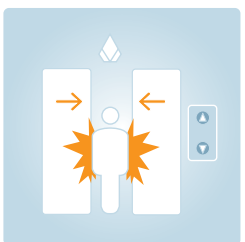
low

- *Tripping and falling*

30

No or inadequate protective devices on power operated doors

Person is passing the doors when door starts closing

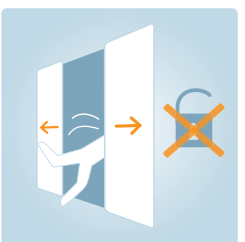


Person is hit or jammed by the door, serious injury

31

Unsafe locking device of landing door

Landing door closed but not properly locked, person opening the door



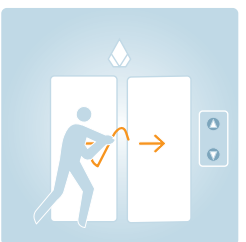
high

Person falling down the well, Serious injury or death

32

Unlocking of landing door possible without a special tool

Persons unlock and open door



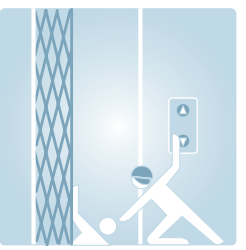
high

Person falling down the well, Serious injury or death

33

Well enclosure with perforated walls near door locks

Person is unlocking the landing door without a special tool, e.g a stick



high

Person falling down the well, Serious injury or death

34

No automatic closing device on sliding doors

Door remains open after emergency unlocking or when car leaves the floor due to creeping

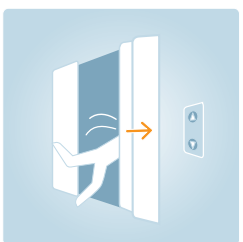
low

Person falling down the well, Serious injury or death

35

Inadequate mechanical link between panels of landing doors

Mechanical link fails, one panel remains open



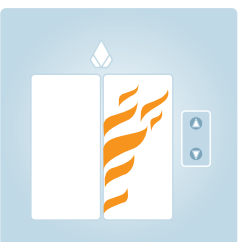
high

- *Shearing or falling of persons, fatal or serious injuries*

36

Inadequate fire resistance of landing doors

Fire in front of landing doors is spreading into well and to next floor



high

- *Persons in upper floors killed by fire and smoke*

37

Car door is moving when landing door is opened

Person entering the car before the car door is fully opened

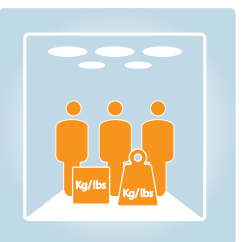
high

- *Trapping and shearing of hands*

38

Large car area in relation to rated load

Lift is not used as intended, car is overloaded with persons and/or load, car slips away from landing



high

- *Persons are sheared and crushed, serious injuries*

39

Inadequate length of car apron

Rescuing of trapped persons when car is stopped above landing

low

- *Falling down the well*

40

Car without doors

Goods in car hit sill or recesses on wall and tip Person enters gap between car sill and wall

high

- *User crushed, serious injury or death*

  Shearing and cutting of limbs, Serious injury or death

41

Unsafe locking of car roof trap door

Car moves with trap door open, e.g transport of long goods

high

- *Persons in car crushed*

42

Insufficient strength of car roof

Maintenance / inspection persons on car roof, roof collapses

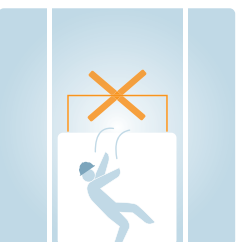
high

- *Falling through the car roof shearing and cutting*

43

No inadequate belustrade on car

Maintenance / inspection persons trips or stumbles and falls into space between car and wall



high

- *Falling down the well, serious injury or death*

44

Insufficient ventilation in car

Breakdown of lift, persons trapped

low

- *Suffocation, heat exhaustion, panic*

50

No or inadequate safety gear and/or overspeed governor on electric lifts

Overspeed down or free fall of car due to suspension failure, breaking of traction sheave shaft, brake failure

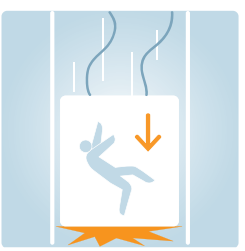
high

- *High deceleration of safety gear or crushing into pit, serious injury or death*

51

No or inadequate slack rope switch for governor rope

Overspeed of car, governor doesn´t trip safety gear due to slack governor rope



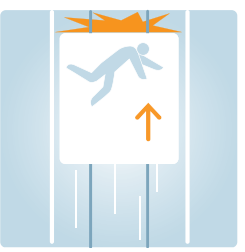
high

- *Persons in car crushed , serious injury or death*

52

No protection means against ascending car overspeed on traction drive lifts and positive drive lifts with counterweight

Overspeed in up direction due to failure of traction sheave shaft, brake failure



high

- *Person in car is crushed when car hits the roof of the well*

  Maintenance person is crushed on car roof

53

Inadequate design of lift machine of electric lifts

Failure of lift brake or other part between brake and traction sheave/ drum. Uncontrolled moves at landing with open doors

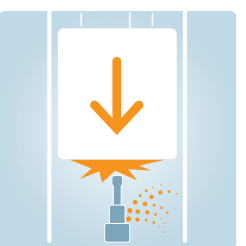
high

- *Person is sheard between landing and car door*

54

No or inadequate protection against free fall, overspeed and creeping on hydraulic lifts

Lisft is not used as intended, car is overloaded with persons, and/or load



low

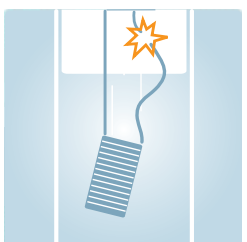
- *Car crushes into pit, persons crushed*

  Car leaves landing with door open and person falls

55

Counterweight or balancing weight guided by two wire ropes

Broken or slack guiding ropes



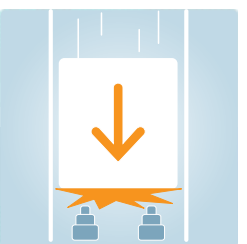
high

- *Counterweight / balancing weight hits car, people in the car crushed*

56

No or inadequate buffers

Car or counterweight/ balancing weight is hitting the buffers due to a failure in the mechanical system



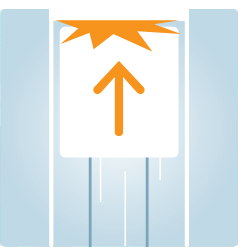
high

- *Users in the car or maintenance persons on car roof crushed*

57

No or inadequate final limit switches

Car doesn´t stop at extreme landings and continues to run



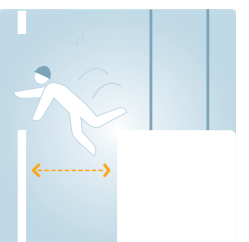
high

- *Damage on machinery if run time limiter fails*

58

Large gap between car and wall facing the car entrance

Lift has a brakedown, person is escaping throuhg the gap by self rescue



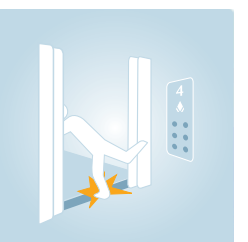
high

- *Person falling down the well or shearing when car starts to move*

59

Exessive distance between car door and landing door

Playing children getting in between



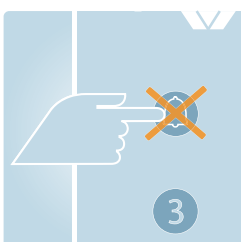
low

- *Falling down the well or crushing when car starts, serious injury or death*

60

No or nadequate emergency operation system

Lift brakedown, instructed person tries to rescue trapped users, rescue is delayed, unsafe



high

- *Panic, claustrofobia, persons falling in the well*

61

No shut off valve

Maintenance person opens connection between hydraulic piping and valve block

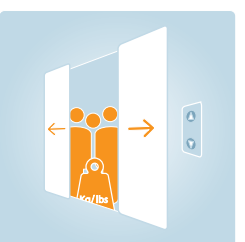
high

- *Release of oil to maintenance person, pollution*

62

No independent starting contactors

Welding of main contacts, sticking of armature, car is moving with open safety chain



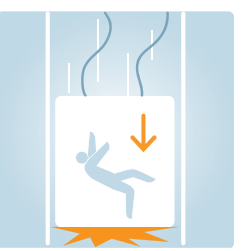
high

- *Person sheared between landing and car door, maintenance person sheared or crushed on car roof orn in pit*

63

No or inadequate slack rope/ chain device

Car is stalled when moving down , car falls



high

- *Users crushed*

64

No run time limiter

Machine is running with car stalled

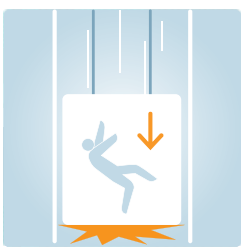
low

- *Damage to equipment which increases the propability of injury of persons*

65

No or inadequate low pressure device

When hand lowering, blocked car can fall down



high

› *Persons in car crushed*

66

Insufficient protection and marking of electrical equipment

Maintenance/ inspection person touches live contacts or terminals

high

› *Electrical shcoks*

67

No or inadequate protection on lift macine motor

Short-circuiting or overheating of lift machine motor, breakdown of lift, persons trapped

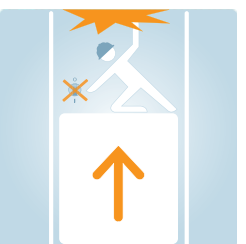
high

› *Panic, claustrofobia*

68

No lockable main switch

Person eswitches lif on when another person is working on the lift



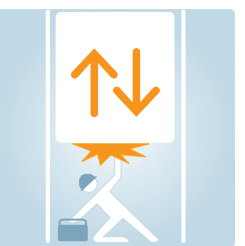
high

› *Maintenance/ inspection person is sheared or crushed*

69

No protection against phase reversal

Unexpected movement in wrong direction due to phase reversal



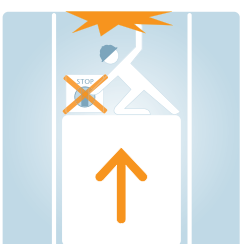
low

› *serious injury to maintenance person*

70

No or Inadequate inspection control and stopping device on car roof

Uncontrolled movement of car when maintenance person is on car roof



high

- *Shearing and crushing*

71

No or inadequate alarm system

Users trapped due to breakdown of lift

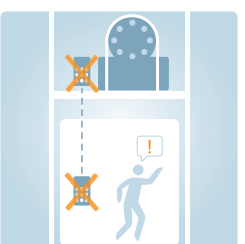
high

- *Panic, claustrofobia*

72

No or inadequate communication system between machine room and car

Trapped persons in car try to self-rescue, unexpected car movements



high

- *Person sheared or falling down the well, injury*

73

No or inadequate load control on car

Car is overloaded and travels in down direction, car passes the destination floor

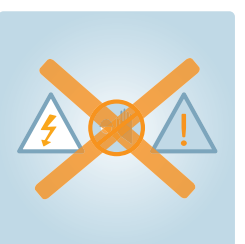
high

- *Shearing and crushing between car and landing door, serious injury*

74

Missing notices, markings and operating instructions

Users oversload the car, persons get into haezardous situations



low

- *Serious or fatal injury*

KONE CARE FOR LIFE EQUIPMENT CONDITION ASSESSMENT

Photgraph: Antti Ahtiluoto, 2009

Dedicated to People Flow™

Care For Life

CONDITION ASSESSMENT

Performance
Eco-efficiency
Accessibility
Aesthetics
Safety

Manufacturer
Kone Oy

Installation year
1975

Type of elevator
electrical elevator

Load
375 kg

Speed
0,6 m/s

No. of stops
6

No. of breakdowns
5 per year

KONE CARE FOR LIFE
MAGNETS

In the end

Tough the actual design tasks appeared to require more work than I thought at first, I had a very positive experience working with the client. The schedule was tight enough to keep me concentrated on the subject, and regular deadlines and meetings kept the project in process. I felt that the KONE team was very supporful, and comfortable to work with. Yet from time to time I felt that all I ever did was somehow related to this project. Constant text editing and placing of icons in to an Exel document was frustrating, especially in the end of the process and they toke way too much of my time from the design work. Luckily, the client started to realize that too. Also I have to express a small amount of disappointment on the testing of the Safety Icons. I think it could have been organised better and with a pigger volume to gain more objective results.

As I think back at the design process itself, I feel that the actual fact, that the customer asked something so specified from me in the beginning of the project, actually, effected negatively on my creative thinking. I was so caught up with the pictogram thing, that I didn´t undestand to question, weather It was the best possible solution for this particular case of visualizing information. When the time came that I started to see other possible solutions, it was unfortunately too late to start to work with them in practise. I simply tried to make the best that I could with the chosen path.

I realize that it would have been much more easier for me to write this thesis in Finnish. Still it was a conscious decision that I made, when taking the challenge. I was willing to do it and I am still happy with it. I must say that I was rather confused with the way the authority in the Packaging Design Department reacted on my decision. I felt strongly that it was not supported by the institute and that I was slightly left alone with this project. This is a fact that I am sure has effected on the results of this work. Yet help was always there when needed, and therefore I have a lot of people to thank in this institution and outside of it.

As I look at the big picture, I consider my graduation project as a successful piece of work consisting of an ensemble of various small elements. I feel that I chose a relatively challenging path to walk, when I decided to do my final projcect about something, that I wasn´t really familiar with before. As far as the aim of the final project is to be a learning experience, I can say that I have learned a lot during

these six months. In my weakeset moments I have thought, weather it was a wise thing to actually conduct a final project “learning by doing”, but on the other hand, at best I have been enthusiastic about new subjects and things and the fact that I have had to work hard on this project. According to the amount of paper sketches and files on my computer, I am willing to believe that some progress has happened. Now that the actual work is done, I can say I am satisfied. Since I have gained positive feedback from the KONE team and actual new assigments, I have potential to believe that the customer is satisfied as well.

During this project I have created a close relatonship with information graphics and information design and hope that in the future I will have the opportunity to be envolved in design projects related to these subjects more.

Sources

PRINTED SOURCES

EN 81-80 HAZARDOUS SITUATIONS
ECXPLANATIONS
AND SAFETY DRAWINGS,
Kone Corporation
06/22/2005

DATA FLOW
- Visualising Information in Graphic Design
(toim) Klanten, Bourquin, Tissot, Ehmann,
Die Gestalten Verlagen, Berlin, 2008

DESIGN MANAGEMENT, Yrityskuvasta Kilpailuvaltti
(Toimituskunta: Liisa Poikolainen, Marja-Leena Andelmin,
Ulla Casagrande, Hilkka Hiltunen, Yrjö Klippi, Tuula-Riitta,
Heikki Mäkijärvi ja Jukka Rissanen)
Otavan painolaitokset , Keuruu 1994.

Design Writing Research- Writing on Graphic Design
Ellen Lupton & AbbotMiller,
Phaidon, London 1996.

INFORMATION GRAPHICS –
Innovative Solutions in Contemporary Design
Peter Wilburg & Michael Burke
Themes & Hudson, London 1998

International Picture Language/ Internationale Bildersprache.
A facsimile reprint of the [1936]
Otto Neurath
Department of Typography & Graphic Communication
University of Reading, Reading 1980.

THE LITTLE KNOW-IT-ALL: Common sense for Designers
Silja Bilz
Die Gestalten Verlag, Berlin, 2007

MODERNIT HIEROGLYPHIT -Progradu
Kukka- Maria Kiuru
Lapin Ylipisto, 2008

OPEN HERE – The Art of Instructional Design,
Paul Mijksenaar & PietWestendorp,
New York, Joost Elffers Books, New York 1999

PICTOGRAMS, ICONS & SIGNS -A Guide to Information Graphics
Ryan Abdullah & Roger Hübner,
Thames & Hudson, London 2006.

OTHER SOURCES:

SNELL- Improving Safety and Accessibility of Existing Lifts in Europe
Version 1
Luc Rivet

04/06/2004
Wayfinding Systems. Webesteem Magazine no. 9.
WYMAN, LANCE(2004):
http://art.webesteem.pl/9/wyman_en.php>
downloaded in fall 2008

Linking Huichol imagery to Op Art
gave the Mexico Olympics a memorable graphic identity
CAROLINA RIVAS, DAOUD SARHANDI
http://www.eyemagazine.com/feature.
downloaded in December 2008

Olympic Games Museum (2007).
Olympic Games Pictograms. 1972 Munich,
http://olympic-museum.de/pictograms/Picto1964.htm>
downloaded in December 2008.

www.kone.com
kone media library

LITERATURE

Kuinka ideat syntyvät- luovan ajattelun käsikirja
Jussi Koski, Saku Tuominen & Ilkka Kärkkäinen
2007, WSOY

Typografian käsikirja
Markus Itkonen
RPS Yhtiöt, Helsinki
Gummerus Kirjapaino Oy, Jyväskylä, 2004

PICTURE SOURCES

Pia Sissala
Antti Ahtiluoto
Kone Media Library
www.flickr.com