

Final Report DC222 'Light, camera, action'









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Introduction



This document withholds a report of our process from an in depth research to developing a method for moving into ambient intelligent movies. Movies, where the users are able to create their own personal version and influence the ambience of the movie followed by a reaction of this new media, which influences the user and the room.

We're talking about moving into (ambient intelligent) movies.

This has everything to do with the experience evoked and the interaction handled, in a way this can be called entertainment experience design.

A project description is analysed and formed into a vision of the project team. From this point onwards in depth research is done to get a good view on the coherent subjects for example MPEG 4. Conclusions are made and implemented into preliminary concepts after several brainstorms. These concepts are discussed with the client and formed into a final concept.

During this project we went through different phases. We first started with the research phase to get familiar with the project description and the way we had to think during this project. After the research phase we started with the generating ideas phase and the concept development. During this second phase we still had to look back a lot to our research phase to make sure our new ideas where grounded and based on our research. The third phase was the realisation of our concept: as well as the form as the technology behind it. The final phase was the presentation of our concept and the real story behind it.

In this report you will go trough all these phases to see how we came to our final concept: The Mov'in!

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Project Description



At the beginning of every project a Project Description is distributed to get the team familiar with the task at hand. After this description is analysed a vision is created in order to get the view of the team clear to the client.

'Movies create an imaginative experience to stimulate our dreams, hopes, desires, fears, where increased presence and 'to be there' feeling captures the observers lust; the imaginary film becomes the truth and the dream is a reality.'

That was the first sentence of our project description as it was for us to create an interactive movie which can interact with the environment of the user and the user can interact with the movie due to the environment.

'The next age of people's interactive media experience will not be on a computer or television, or in a headset, but in a whole physical space which is responsive to and activating people's movements, gestures, speech and touch. Projectors, screeds, cameras, sensors, sound makers, lights and colours, objects all actively connected with each other and with people going into it.'

Our assignment was to realize this in a way that can be used now and that is feasible now. Because nowadays a film is experienced through empathy; you just watch a movie without participating in that movie.

Our task was to create a concept so you could be actively involved in 'watching' a movie. Our questions were: Are a part of the movie?, Can alter the plot of the movie?, Are you an actor in the movie?, Can you also just only watch the movie and do nothing? How do you move into movies?! How can you Mov'in?!

We had to make use of technology and make use of space and objects in our design and this all for the home environment. So it had to be used in everyday life and you don't need to adapt your entire environment because of our concept.

Our whole concept is about the experience of watching a movie and how you act while you are watching a movie; entertainment experience design.

'The entertainment experience refers to the experience that people voluntarily going through for their pleasure and release, that has a beginning and an end, and that affects people and the context as a result. Movies are good examples for creating entertainment experiences. While integrating the movies into the physical environments, many design issues have to be taken into account.'

Vision



It is all about experience, the experience of being involved in a story in a certain way.

We wish to have a new experience simply because we do not want to copy something that already exists. The challenge is to create something new and interesting that will interest the people in experiencing this new media We are going to design.

The way we see it, this experience will be somewhat between a movie and a game; the movie has this emotional experience; you feel linked to the characters and slightly get into the story. Although a movie is quite passive in ways, there is still a small part of interaction due to the emotions you experience. The active side comes from games, they encompass a more active participation because you are involved as a crucial element of the game but limited to most people by the interactions methods, only using small tactile controls such as a mouse and keyboard. We will not use the terms 'movie' and 'game', but will only use the aspects of those parts in the development of our new experience.

The goal is to design this experience of emotionally active involvement in a story. This all coupled to a rich interaction that makes some influence to the story possible via a subtle and natural participation from the user. This involves using the senses of people to tackle these emotionally bound-experiences Think of invoking emotions such as surprise and curiosity.

A supporting feature will be the effect the new media has on the environment of the user. So this is a two-way interaction experience. These days the experience is brought from "the outside", the virtual world (single small screen and stereo sound) to inside the movie (from bigger screens and multi-directional sound to theaters and IMAX). We wish to seek new interesting methods for enriching this environmental change in order to expand the feeling of being inside the media and connecting the virtual world to the "real world".

We want to focus on the people who use a home entertainment system with a widescreen TV and multi-directional sound. This is not bound by age, gender or social status. The people who use these systems are interested in its possibilities and will most likely like its features to their full extent. This means we will be bound to the possibilities of the living room of these people if we want it to integrate into their space for these kinds of entertainment possibilities. The motivation for this choice is that the emotional experience at home is not bound by any social constraints as in a movie theater. You are more likely to get emotionally attached to a story in your own home as you would in a large group of unfamiliar people, you feel freer to react to the emotions that arise. Free to express, to be active, reactive to your emotional involvement.



As mentioned in the introduction we went trough different phases during this project. Of course we started with the research phase (see page 7) but after this phase we had to go to the generating idea phase and the concept development phase. This was a problem for us because our project description was hard to understand.

Well maybe not hard to understand but for us it was hard to get an idea how to handle this problem. What kind of concept we wanted to make was not clear and we also did not knew in which direction we wanted to go.

This was something that made us get stuck in the process. We did our research but didn't know at what level we had to think for our concept.

During our interim presentation we presented the ideas we had so far (see the handout of the interim presentation). These ideas where very far-fetched and not feasible for in a home environment; well maybe for in the future, but not at this moment.

After a meeting with Kees Overbeeke we understood that we used a wrong approach for our problem. We wanted to get to a concept so willingly that we were only searching for a solution and not starting with the meaning/approach of the real problem.

We made states in which we wanted to alter and with which we want to achieve something.

What was the situation we were in?! We should describe a context and restrict it. We had to outline the problem and make a good context for the problem. We had to get the problem to an abstract level and think of it in this way of solutions and than bring it back to reality.

This is what we did and using this approach the problem became a lot clearer. Eventually we had a concept and we could realize it.

Because of the fact of the wrong approach in and the search for a good understanding of the problem we lost a lot of time in the beginning. Therefore we could not realize our concept completely, although we have a working, technical model and different tryout models to experience the interaction with the movie. We presented it first with a normal presentation, but our concept would be better understood when everybody could try it for itself so we decided to make an exposition of our concept.

Although we have had several problems during this project the phases we had to go trough have been clear; research phase, concept phase, realisation phase and the presentation phase.



Research is needed as a basis vor every design. In the beginning of our project our research was based on the things coherent to mainly movies in combination with some kind of experience.

So the research was divided in different sections:

- Research on movie/media
- Research on games
- Research on interaction
- Research on software related to the project
- Research on colours and emotionnal links
- Research on spatial distribution and the home environment (living room)

Research on movie/media

Since the development of the theater not much has changes. It still involves a big screen, multiple seats and a nice sound production. Current theaters are all using a huge screen with the latest technologies and omni-directional sound. Digital movies are making their entrance in the current theaters and overall quality is improving.

Other theater-like movie-based designs involve IMAX, simulation rides and 3D-movies. IMAX is just a very big theater with a bigger screen.

IMAX can give you the feeling you are inside the movie, only triggered by a big screen and the added sound.

Simulation rides offer the same emotional experience but enrich it by adding motion to the process.

3D-movies exist for a long time now; the more they are linked to the real world, the better they experience the media. Although most 3D movies are not very realistic in effects and view, some new computer animations these days cannot be distinguished from the real, only by knowing that these things are not possible in our world.

In the future the rides and movies will become more realistic and will interact more with the audience. The audience will become more aware of being inside the movie and will have their brains played with. We are all victims to these illusions, but at least it is fun.

Research on Games

These day's games are reaching a level where they are going to tip. Normal games are as interactive as they always have been; the interaction exists only by the user giving input via mediums such as a mouse, keyboard or new add-ons such as steering wheels, joysticks, gamepads and guns. Extensions of these types of entertainment can be found in de arcades. Big machines where you actually step on a bike or sit in a car and ride the game, dance moves you have to perform at the speed of the dancer or music, a boxing simulation and many more. New innovations for the home environment have arrived; think of the EyeToy, where you are recorded by a camera which uses your movements as input for a game. The goal is to use your body movements to accomplish different goals such as hitting incoming balls with your arms as an imaginary bat.

The experience is quite different when playing different games. You can get carried away and be actually mad when things go wrong, games are addictive and when not being able to finish certain parts a person could get agitated, and when you do: euphoric. With the coming of bigger screens and omni-directional sound the experience was enriched, you feel more a part of the game.

Research on Interaction

Interaction is all about communication. In this method of interaction between man and machine there are obviously two sides; the human side with all its emotions and



experiences, and the computing side with all its hardware, circuits and many unexplored new "senses". All aspects of Ambient Intelligence.

At the moment new media experiences are limited to the sensory stimulation of the eyes (via the visual aspect of a screen), the ears (via a sound system) and some touch (via the vibrations in a possible bass system or vibrating chair). The aim would be to enrich this experience and explore the stimulation of more senses to get a higher level of experience and entertainment.

There are many things to consider when thinking of the hardware. A design should be adapted to the senses in order to enrich this experience. Some of the things a design should tackle:

- The skin of a product is the contact point and thus the point where a rich tactile feeling must be obtained.
- New materials with new interesting properties could be quite useful, think of magnetic properties, memories features or materials that change shape, texture, hardness, size or any other aspect in order to change the environment and your emotional state.
- Interaction coming from the hardware itself, context awareness and other new technologies will enable objects to be more responsive to their situation, both physically and culturally.
- It will be important to have full interaction without any delay but also being able to adjust this link to your own liking.
- We use new technologies to get new visions on things, think of infrared vision and enhanced hearing for the impaired. This can broaden our senses in new ways we never thought possible.
- When thinking of space try not to limit your thoughts to rooms and chambers but also think of the Internet, LAN, WLAN and other facilities.
- What about being able to merge into a digital world? Projecting yourself into new locations telepresence.

The challenge seems to be to bring the people's sensorial experience and the technology closer together, to create this new way of interacting in a more natural end emotionally-based way. And do not forget about an all important item: choice, people need choice, interact or not, connect or disconnect. The more people feel part of the experience, the deeper the experience becomes. We have to rethink the nature of the human senses and the environment in relation to the new reality and create an environment that responds to the subjectivity of our moods, wishes and lifestyles.

Research on software related to our project

MPEG 4 is a fairly new video standard. This standard makes video steams suited for different devices. From cell phones to PDA's to TV's and to computers with a broadband internet connection.

This is particularly interesting for our project. Because the movie consists of objects that can be altered by the user an interactivity that goes further than play, pause and stop becomes possible.

SMIL is something similar to MPEG 4. But where in MPEG 4 the different objects are always on the same device, they can be on different devices with SMIL. This is called distributed media.

SMIL has the potential to support distributed media, but as a standard, it only controls distributed media over several window containers on the same computer/device.

In StoryML there is an "Interactor Manager" that is able to communicate with the different interactors connected to the system (like a light and a robot). When a certain action is requires (for instance there should be red light in the room) the Interactor



manager sends out a message to all interactors. The interactors, in turn, send a message back to the Interaction Manager with their capabilities (for instance talking, or change the color of the light). When a capability of a interactor matches the required action the Interactor manage transfers the tasks to the interactor.

Using software like StoryML we'll have a consists of different objects. These objects can be all sorts of things like a 3d object, a picture, an animation or another movie fragment. Interactivity is reached because all the objects can be altered by the user. The objects shouldn't necessary be on one device, but can be on different devices.

Research on colours and emotional skills

When color is used correctly, it can add a tremendous impact to your product or concept. When used incorrectly you can lose this impact and the user can interpret the meaning of the chosen color wrongful.

Colours symbolize and trigger emotions, memories and ideas or thoughts without you even realizing it. Color creates the user to responses, by stimulating emotions and communicating on levels other than reason and intellect. It can excite, impress, entertain and persuade, but color can also create instant negative associations.

In our project we only needed the colours that connect to the emotions we had chosen. These colours we used to ground our emotions, not to really use these colours in our concept, but only to show and strengthen the emotions.

For the emotion 'love' we chose the colour red. Red a.o. is the colour for love, strength, sex, impulse, passion etc.

For the emotion 'action' we chose the colour orange. Orange is a.o. the colour for excitement, energy, playfulness, enthusiastic etc.

For the emotion 'fear' we chose the colour dark green. Dark colours have a negative influence and are dramatic and mysterious. Green is the colour for disorder. For the emotion 'sadness' we chose the colour blue. Blue is the colour for calming, peaceful, trust, comfort, coolness etc.

Research on spatial distribution and the living room

In a living room the TV/entertainment system are almost always placed near a wall and the furniture is placed in a half circle around it.

To change the experience of watching a movie we, for example, needed to change how the environment of the living room makes you view the movie. By using the principle of different perspective viewing we can already make a change in the arrangement of the furniture of the living room. Or we should come up with a very good concept that makes you aware of the movie in another way.



Research conclusions and concept solutions

The research, which was based on many different subjects coherent to our theme, gave a clear outcome; there were 5 important subjects to cover:

- Experience
- Interaction
- Environmental space
- Social relationships
- Activity

Concepts were created supporting these outcomes in a clear way. But after evaluating the concept directions with the client it became clear that they missed a general direction and did not focus enough on the interaction, but more on the display methods.

The alteration of the real world so that the virtual world changes was not there, it lacked depth.

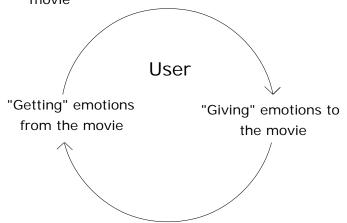
So the next focus point lay on the alteration in a natural way.

When looking back at traditional movies, als well as theatre, it was found that emotions play a big fole in how we experience the media.

Love stories, thrillers, dramas, they all work on your emotions in order to create such an intense experience that you want to continue watching it. Sometimes you keep the emotions after the movie, or when the play is over (e.g. you might still feel very sad the whole night after you've seen a movie about the war). These emotions should be used to make the movie interactive.

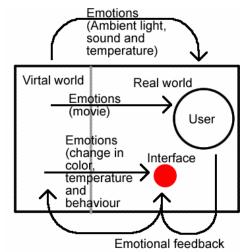
Using the emotions as an input can be seen as a combination of the "experience" (getting emotions of a movie), "interaction" and "activity".

It is thought that using the emotions the user already got will make the (interactive) movie experience more intense than the experience as it is now. In this experience the user is in a constant loop of giving emotions to the movie and getting emotions from the movie



Since giving emotions to the user is already done (via the movie itself and added features like Ambilight), the only thing discovered was a way to get the emotions from the user. Since making the user feel observed is something to be avoided (you might use a camera with gesture / behavior recognition software in order to "get" emotions from the user) an interface was needed to which the user can reflect his emotions. This had to happen in a natural, unaware, way. The interface should invite the user to show his emotions on it. For instance: you can show love to a teddy bear, or show you fear by hiding behind a cushion. The shape, color and temperature of the interface can change as well to intensify the relation of the interface with the movie. The interface becomes the link between the real- and virtual world.





From this point a list of requirements was made for the interface of the interactive movie.

Requirements for an interface for interactive movie.

It should be able to get information of the emotional state of the users.

- It should have touch sensors. (The goal is to translate the frequency, intensity and force of touch to emotions)
- It should have movement sensors to see how the user moves with the device (the user might, for instance, shake or swing the device according to his emotional state)

The emotional states that were chosen to be distinguished are:

- Fear
- Love
- Sadness
- Happiness

(A limited number of emotions were chosen to keep it feasible. These emotions are strong enough to show the concept and deduced from film emotions.)

The colours that the interface should support for these emotions are:

- Fear -> Very dark green
- Love -> bright red, pink
- Sadness -> dark blue
- Happiness -> yellow/orange

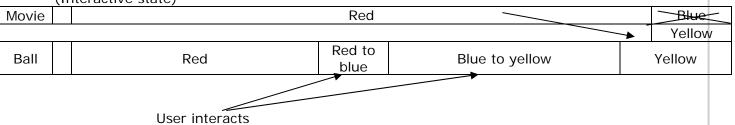
The behavior of the interface during the movie can be seen a three large parts. During each "state" you can interact with it.

- An idle state in which the color correspondents to the movie.
- When the atmosphere / plot in a movie changes the ball will function as a "foreseer" so that the user can see where the movie is going to. This can be a trigger for the user to interact.
- A state where the user is interacting with the interface. The user will project his emotions on the interface. This will cause the atmosphere in the movie to change. The atmosphere is related to the events in the movie. (So there will be a plot change)

(Idle and "foreseer" state)

(Tale and "foreseer" state)							
Movie Red			Red	Blue	Ye	ellow	
	Ball		Red	Red to Blue	Blue	Blue to Yellow	Yellow

(Interactive state)



The colors in these boxes stand for emotions and atmosphere in a movie / in the interface.



The interface should be able to facilitate all functions mentioned above.

At first a start was made with movement. It was found that movements go with the emotions. These 4 emotions are being used:

Fear -> getting closed / close yourself off
Love -> open up a little bit. Show your inside to only one
Happiness -> extrovert, present
Sadness -> let it go, hang









Happyness

Sadness

Fear

Love

The user will be the director, or the constructor, of the movie. The user will have some information about what is coming. With this information, together with his emotions, he can alter the events in the movie. When the user decides to do nothing he will still see a movie.

This interactive movie is being designed for the home environment / the living room. The most important function of the living room is its social function. The family members come together in the living room to talk to each other and relax. This function of the living room is something that has to be maintained.



The form

After we'd worked with Sietske Kloosters "design movement" technique in combination with classic brainstorm techniques, we had an idea of the qualities and the form of the product that we wanted to design.

We wanted it to be a form that supported the user to show his emotions to the movie and we wanted that to happen in a subtle way, with the use of the users body, after all we wanted the user to be more actively involved in a movie. In order to get this interaction we wanted the designed object to show to the user that it was connected to the movie, that it was connecting them to the movie. Finally we decided that the designed object could be used while sitting on the couch. We wanted the user to be more actively involved in the movie, but for now we didn't see it happen that they would "run around in their rooms".

In the process of form finding our design evolved from a simple ball to an X shaped pillow.

Sadness supports the posture of sadness by hanging over and being very heavy. You can search for support or just cry away.

Action supports the posture of action and fighting with the pillow. You want more action, you will get more action.

Fear will protect you from all the horrible things that you can see in the movie. It is all frightened and frozen so you don't have to see anything.

Love will hug you back and will be in love just like you.

The ball

Our first idea was to make a ball with which the user could interact. Mainly because of the numerous interaction possibilities that a ball could have. The ball could for instance be thrown against a wall for more action in a movie or be hugged for more love in the movie. Further, research made clear to us that colors are linked to emotions as well. Given this theory we wanted the ball to change it's color according to the atmosphere in the movie to show to the users that it was connected to the movie. When we evaluated this idea with interaction expert "Kees van Overbeeke" we found out that there were certain problems with the ball. The biggest problem was a semantic one. When you see a ball, you see numerous of interaction possibilities. You might kick it or throw it away, but showing your emotion to it is not natural. With this comment in mind we went searching further for a form that was more suited to project your emotions on.

The animal

When we thought further about things you can reflect your emotions on we thought about animals. A dog for instance can be loved, punished, and used for support by the owner. Further a dog is able to show it's emotions. Mainly by making sounds and body gesture. These qualities were very interesting for our product. We worked it out to a simple shape consisting of 2 components shown below. By adjusting the position of the "head" and the "fur" it's able to show emotions. The problem with this animal was that it was very good in sowing emotions, but not so good in "receiving" emotions, while it's very important to us that the user could show it's emotions to the designed object in a subtle way.

The Mov'in

To find a form that supported "receiving emotions" better we looked at if and how the user is showing his emotions in the current situation. We found out that the pillows that are usually laying on a couch are an overlooked opportunity. People sometimes hide behind a pillow if the movie is to tense for them, or hold a pillow to their body when it's a very sad movie. This was the starting point for our final design.



In order to enable the pillow better to receive emotions it's shape had to change. We wanted it to support the body gestures shown in the figure in the introduction. Further we wanted to enable it to change it's gesture according to the "current emotion" of the movie to show the user that it's connected to the movie. After some brainstorms we came up with an X shaped form for the pillow. This shape is inspired by the human body. You can form your body around this shape in all kinds of ways. Further the "upper arms" of the pillow are longer than the "lower arms". This gives the pillow a top and a bottom. The short arms can easily rest on your lap, while the long arms can, for instance enclose you. The way you use your body with this object can reveal your emotional state. In the coming section we will discuss how interacting with this pillow will influence the movie









Sadness Action

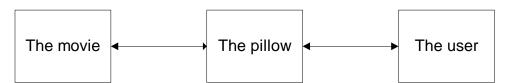
Fear Love

The interaction

The interaction might look a little bit complex but actually is quite simple. First I'll provide you with a scheme of the interaction. Then I will explain how the user will use the pillow for interaction.

Schematic overview of the interaction

In the scheme below you can see that the movie and the user are interacting with each other via the pillow. There is communication back and forth between the pillow and the movie and between the pillow and the user.



So the user can influence the movie by influencing the pillow.

Below I will describe the interaction. Firstly in the case where the user decides not to interact with the pillow and secondly when the user decides to interact with the pillow.

No interaction from the user

The atmosphere in a movie always goes from one emotion to the other. For feasibility we've chosen four of these movie emotions to show our concept. These emotions are: Love, fear, sadness and action.

When the user decides not to interact with the pillow the movie will continue playing it's main plot. The pillow would adjust its posture to the "emotion of the movie". The user is able to show his emotions to the pillow, when there's a chance of events in the movie and the pillow takes a different posture the user would go along with this movement. Schematically it looks like this:





Via the pillow the movie shows emotion to the user. The users goes along with this emotion

Interaction from the user

The user can interact with the movie in two situations. Firstly when the user wants to change the atmosphere in the movie. And secondly when the user doesn't want the movie to change it's emotion.

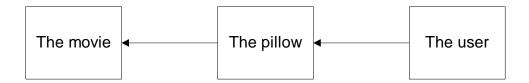
Change the atmosphere

When the user is bored or unhappy with the current atmosphere of the movie he can interact with the pillow. A nice example is for instance the transition from fear to love. You can imagine the movie to be full of intensive fear. The pillow is stiff and straight. All this fear is getting too much for you and you'd like the movie to be more lovely. In order to get more love you will hold the pillow close to your body, or even caress it. The pillow would "sense" your emotions and adjusts its posture. Finally the movie will react and show a more lovely atmosphere.





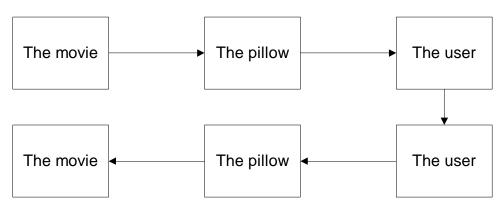
Schematically it would look like this:



Hold the same atmosphere

The second situation is that the atmosphere in the movie is changing (because of the movie script). The user will sense this because the form of the pillow will start to change. But the user doesn't want the atmosphere to change, because he's satisfied with the current state. In order to keep the current atmosphere the usere can (more firmly) hold the pillow in it's current position. As a result the movie will keep its current atmosphere. Schematically it will look like this:





Concluding you can say that the user is always the boss over the process. He can choose to get guided through the movie taking over the emotions from the movie and the pillow. Further he can choose to change the atmosphere in the movie, by interacting with the pillow. Or he can keep the movie in the current atmosphere by not letting the pillow change its posture.

The technique

This is a part of the concept that isn't worked out in detail. We can give a list of the requirements for the pillow.

- It should have one central point to which the four arms are connected.
- Each arm should be able to move individually. This can be done by linear motors, or servo's
- The pillow should be able to communicate with a processing unit. This is done with wireless communication.
- The pillow should work on a rechargeable battery. Preferable the batteries are recharged while the pillow is laying on that couch and no movie is playing

We've made a working prototype of one of the arms. In this prototype there are pneumatic pistons in stead of linear motors. The arm also is still wired.

The Mov'in materials

The outside is the used as a skin that translates to the user and the inside also contributes to this feature. The Mov'in has 2 interesting features that are able to change but it must be said that these functions have not been implemented yet; this is just something that fits into the future development profile.

One of these functions is the stiffness of the Mov'in; it is able to change according to each emotion.

- fear: very stiff, linked to frightened and you are not able to change the shape easily
- love: very soft, being able to change it a bit so it suits your own body shape which it is
- hugging
- sad: a bit soft, as if it has lost all interest in keeping its "chin" up, it just hangs there
- action: very stiff, it holds a pose and does this very firm, it is tensed by the action

A variable stiffness can be reached by smart materials, which are available to a certain extent and are still being researched as we speak. These materials are neither cheap nor easy to obtain, but when there will be more need for these product, and when they will be produced on a larger the scale the price will drop and the availability will grow.



Another of these functions is the weight of the Mov'in; it is able to change this as well

- fear: a normal weight, weight is not a very important issue in this emotion
- love: a bit heavier so it hangs against you, but is not too heavy and uncomfortable
- sad: the heaviest one of the four; hanging down like it has lost all will to keep its "chin" up, as if there is a burden on its shoulders
- action: very light, action requires it to be light as a feather so it can produce more action without too much discomfort for the user and without too much struggle from the Mov'in itself

A variable weight is being developed in combination with new arising nano- and biotechnologies. Think of substances that have a chemical reaction with another substances in which they change in mass. Though still under development, it can be expected to show improvements in this field of research any time soon.

The Exposition



Because the final presentation of our project was not as good as we wanted it to be, because it didn't reflect our concept well enough, we decided that we should make an exposition of our product.

In this exposition we wanted to use a marketing strategy to really get to a target group that we found interesting for our concept. What was a good combination of our individual extension weeks and the realization of our exposition with an marketing aspect.

For this marketing strategy we had two meetings with René de Torbal about our 'marketing problem' and how to solve this.

First he came with 7 questions we needed to answer and according to these questions it became clear for us which target group we wanted to reach with our concept and how we could do this.

- What is my product?
 The Mov'in, an interactive movie pillow
- What are the qualities of my product?

 It moves, adapt itself to the emotions of the movie by different positions. It can be adapted by the user and the user's emotions. Can become stiff and soft, according to the emotion of the movie.
- Which qualities would be good for the target group we want to focus on?
 The extra involvement of the user into the movie by the Mov'in. The unaware control of the user at the movie. The movement of the Mov'in, becoming hard and soft, the shape of the pillow, etc.
- What is the message we want to carry out? (slogan) 'Enrich your movie experience!'
- Who would come for such a slogan?!

 The 'wannahaves', people that already have a home entertainment system and always have the latest gadgets.
- What kind of communication materials does this target group use? Internet, TV, the newspapers.
- How can we make optimal use of this communication? For example, make a classy TV commercial.

We decided that we wanted to have the 'wannahaves' as our target group and that the exposition would get a classy look to get the attention of these 'wannahaves'. The first impression is the most important one because this is already the moment whether they decide to buy a product or not, so we paid extra attention to the 'first impression'.

During the second meeting we discussed especially how you can clearly define you product in contrast of other products, like in an evolution (you have a complete new product) or like in an improvement of another product.

Down here you can see in scheme the interaction between the TV and the user.

TV <-> User	Existed as first
TV < Remote control < User →	Next step, the remote control
TV < Remote control <-> User→	The step between our concept and the normal remote control
TV <-> Mov'in <-> User	Our Mov'in is a really evolutionary product



In this way you can see what your product exactly is and why it is so special and why users should especially should buy you product.

Due to this information we could make a set-up for our exposition to reach especially the target group we wanted.











