

Rain

Beetroot

STRATEGIC CREATIVITY SERIES

# KINDRED SPIRITS

Spoiled  
chicken

**The Readership  
in Strategic Creativity  
at Design Academy Eindhoven**

**Susana  
Cámara Leret**

Collaborating with:  
**Brijder, Delft University of Technology,  
International Flavours and Fragrances  
In the CRISP project G-Motiv**

Marijuana

Pine  
needles

Research period April 2013 - June 2013

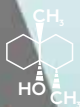
Plastic



# KINDRED SPIRITS

Susana  
Cámara Leret

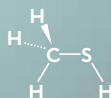
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# Preface

Daniëlle Arets

Can research into the field of serious games, the rehabilitation of youth addicts and a fascination for smell be combined? Susana Cámara Leret brought these ingredients together in *Kindred Spirits*, an extraordinary research in which smell and speculative design create a new service for rehabilitation clinic Mistral (part of the larger care organisation, Brijder).

At the start of her Research Associateship (a design research position at Design Academy Eindhoven), Cámara Leret was introduced to CRISP's G-Motiv project. As one of the research projects of the Creative Industry Scientific Programme (CRISP, a national research programme that focuses on the development of Product Service Systems), G-motiv focuses on applying game-elements as an approach to behavioural change. The research team consists of PhD researchers of Delft University of Technology, researchers of Design Academy Eindhoven and specialists from three serious game companies and two health clinics.

With a strong belief that design can construct new meanings Cámara Leret aims to design prototypes that bring new perspectives to the present, by exploring the future. She interviewed the youth addicts (aged 15-25) from the rehabilitation clinic, Mistral, in The Hague. In this clinic it is common practice to ask patients to share personal stories in order to provide the carers and psychologists with more insight into personal histories that may relate to current addictive behaviours. Cámara Leret, who had previously researched smell, knew that smell is directly linked to the part of the brain that processes memories and emotions, and speculated that sensory tools based on smell could make expressing and sharing these memories and emotions easier. With the help of International Flavours and Fragrances (IFF) she conducted smell sessions with the patients, through which she explored their perception of the facility, as well as personal memories and life stories. These sessions showed that smell motivates patients to share their personal stories indeed. As Berend Hofman, psychologist working at Mistral and advocate for the project, puts it in the interview on page 25 "smelling makes you want to talk".

The realisation that smells help to share stories led to the design of the *Smell-Memory Kit: The Molecules that Matter*, which has since been implemented at the clinic for the intake process. In addition to that, Cámara Leret developed the *Kindred Spirits series*. This series consists of two fictional creatures that prompt new relationships between the patients, staff and their surroundings. Both the *Smell-Memory Kit* and the *Kindred Spirits series* are a design research response to the patients' perception of the clinic and each other. For example, one of these *Kindred Spirits* hides in dark spaces and is extremely sensitive to sound; the other is very sensitive to stress molecules. These fictional, designed 'types' could be a mirror for patient's feelings, but they could also help build confidence with patients in their treatment and rehabilitation.

The design outcomes are not only of use for the rehabilitation clinic, but are also important results for the entire G-motiv research project since it offers another perspective towards behavioural change. Some of the research tools were introduced at Design Academy Eindhoven, where a four-week educational programme was held around the design research on smell (see page 55). Anab Jain was involved to explore a speculative design approach (see page 37). Furthermore, Cámara Leret presented her research at the international conferences *What Design Can Do* (2013) and *Nordes* (2013).

We hope you enjoy reading this publication, which gives an overview of the research entitled *Kindred Spirits*, and the insights of various stakeholders as well as its methodologies.

# Connective Tissue

## Introduction

Susana Cámara Leret

*Kindred Spirits* is a design fictions research project which stages playful interactions in the rehabilitation clinic, Mistral, in The Hague. Its goal is to explore the behaviour of addiction patients and envision alternate possibilities for current systems and services within the clinic. The work was developed within the multi-disciplinary context of the G-Motiv project, under the Creative Industry Scientific Programme (CRISP). Two lines of investigation were explored throughout the duration of the project: an on-going sensory and contextual research centred on the use of smell as a storytelling tool, leading to the design and implementation of the *Smell-Memory Kit: The Molecules that Matter*; and, the co-creation of speculative designs materialised in the *Kindred Spirits series*, to provoke critical discussions pertaining to addiction therapy. Establishing a contextual relationship between this immediate and speculative line facilitated not only designs for existing needs, but also the creation of frames of reference for future possibilities in treatment and therapy, by situating design fictions within everyday life.

Extending beyond the boundaries of pre-defined roles in research processes allows designers to engage with the construction of new meanings and value for people, such as Mistral patients, rather than focussing on problem-solving, which is often still seen as a designer's core skill. This interstitial position for designers<sup>[1]</sup> implies a freedom to explore within a given context, which in *Kindred Spirits* facilitated an exchange of information between the different project collaborators. The partnership with IFF was possible through the commitment of the small, yet incredibly enthusiastic team of the Olfactive Design Studio, led by Bernardo Fleming. Similarly, the work done at Mistral was enabled through the personal time invested by clinic patients and clinicians. The dedication, proximity and flexibility that characterised the work sessions resulted in a deeper understanding of the needs and aims of the patients, clinicians and smell experts involved. These exchanges and insights allowed an iterative design process, which helped the proposals evolve and progress through each interaction, enriching the research. When working with multidisciplinary teams, similar iterative processes allow a more critical and holistic approach to designing services and systems.

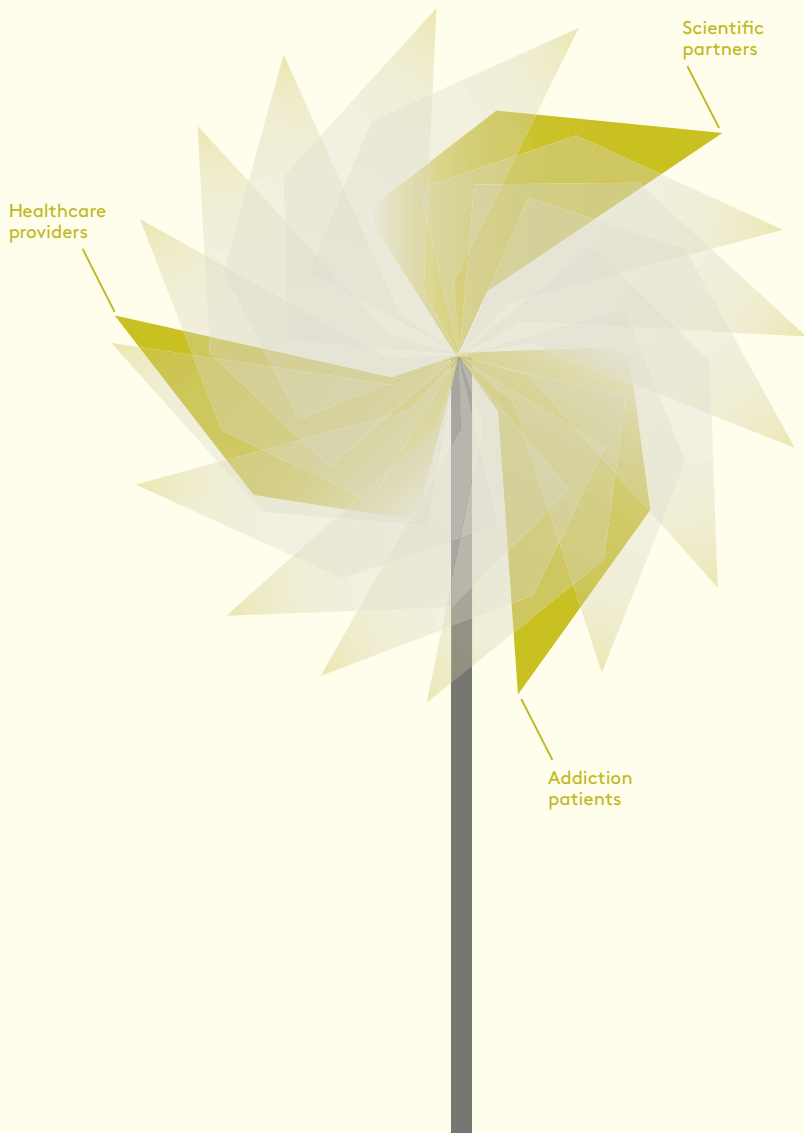
The power of design to bring different people together often changes the nature of the initial research question. Scent as a research method opened up a new research focus within the G-Motiv project: a novel communication tool between patients and staff, which centres on memory and recalling emotions. The collaboration with IFF was introduced to an educational context through the Open Design Space (ODS), *A Message for Oblivion*, a four-week course held in February and March of 2013, at Design Academy Eindhoven. It focussed on the development of future sensing probes. Students participated from various institutes, such as Design Academy Eindhoven, Tilburg University and Eindhoven University of Technology. The exposure to olfactory technologies and the amorphousness of sensory experience was a challenge to participants' educational foundations, whilst introducing them to a different, more strategic role for design.

In May 2013, students, patients and perfumiers all came together at IFF's laboratories to exchange results and ideas, inspiring one another to look beyond the confines of their own professions and worlds. The students' take on sensory experience presented promising future pathways for the scent industry. Similarly, the world of scent control and its intricacies succeeded in engaging the imagination of both patients and students. This experience provided the patients of Mistral a chance to look at the world from a different position: a first-time encounter with a world of possibilities, which allowed us as designers to engage with them in the co-evolution of the project from a different angle.

The various narratives that informed *Kindred Spirits* are compiled within this publication, hopefully extending beyond a single, conventional category. The outcomes present multiple tales relating to human behaviour, with no single answer or solution regarding addiction therapy and treatment. Its essence instead resides somewhere between each personal tale or reflection. These contributions should be addressed as 'connective tissue' that supports an imaginative space, one which is also found between a smell molecule and its associated recollection of place; between the immediateness of gratification, and the shivery, uncanny explorations of the lesser known...

## References

- [1] Cámara Leret, S., & Raijmakers, B. The In-Between: An Experimental Venture into the Position of the Designer. in *Nordic Design Research Conference*, (Copenhagen-Malmö, 2013).



The In-between Position of the Designer



*The Smell-Memory Kit:*  
*The Molecules that Matter*  
is implemented in the  
patient intake process  
of the Mistral clinic and  
explores the links between  
smell, memory and  
emotions

# The Molecules that Matter

## Storytelling and the Smell-Memory Kit

Susana Cámara Leret

At rehabilitation clinic, Mistral, patients share their life stories as a form of treatment. These recollections are frequently referred to as ‘health narratives’ since behavioural patterns often emerge that can aid or hinder recovery<sup>[1]</sup>. These personal accounts are not always the easiest stories to share as, in the context of addiction, they can be accompanied by strong emotions, frustrations and guilt. Focussing on these personal stories provided an initial context to investigate the kind of behaviours that could captivate collective visions for alternative interactions and everyday routines, specific to Mistral. Smell is a speculative tool for storytelling due to its associative power and abstract link to memory and emotions. With the material support of the Olfactive Design Studio from International Flavours & Fragrances (IFF), we began to explore these smell recollections and their associated stories.

In a series of smell sessions, we introduced different odour samples and asked the patients to record their associations with each sniff. We soon realised that – as Berend Hofman, one of Mistral’s psychologist’s expressed – “smelling makes you want to talk”. The limited vocabulary we possess to talk about smells was not hindering but instead motivated the patients’ curiosity to guess and describe each sample’s origin and, more importantly, to share the personal stories and anecdotes triggered by each smell. It was discovered that describing smells and relating to them with personal stories eases sharing personal accounts with others. This led to the design of the *Smell-Memory Kit: The Molecules that Matter*, which would later be implemented during the intake conversations in the clinic.

Our olfactory system is intrinsically linked to the limbic system, the region of the brain that operates memory and emotions. This is why when we smell something, our emotional response precedes any understanding of the scent<sup>[3]</sup>. This associative power of smell allows us to powerfully and emotionally recall past *experiences* when exposed to smells we have previously encountered. These smell recollections, known as the ‘Proustian Effect’\*, are attached to fragments of our memory but do not always consist of lucid accounts. Nevertheless, it is this fuzziness of our



The Kit is composed of eight naturally occurring molecules, enabling a series of smelling exercises guided by a clinician, to prompt recollections of past experiences and aid story sharing for more personalised treatment.



experience of smell paired with its limited vocabulary that turns it into an optimum tool for storytelling.

A smell is a chemical detection of molecules, light enough to evaporate and reach our noses. Nature uses the same molecules in different ways and a small number of molecules account for the vast majority of the smells in the world. Nevertheless, a molecule of *Rose Oxide* smells like a rose because of the associations we have attributed to it<sup>[2]</sup>. Using this underlying structure from scents in nature, we created the concept 'smell-webs'. Within the *Smell-Memory Kit*, a molecule such as *Methyl Mercaptan*, found in spoiled refrigerated chicken, marijuana or faeces, is linked to the molecule *Methyl Anthranilate*, which is found in the smell of jasmine oil. Extending this process, led to the selection of eight naturally interrelated molecules, namely: *Terpinene*, *Beta Pinene*, *Methyl Mercaptan*, *Dimethyl Sulfide*, *Dimethyl Trisulfide*, *Methyl Anthranilate*, *Geosmin* and *Vanillin*.

During our visits in the clinic, we noticed that the intake conversation was referred to as a stressful experience by the patients, and a majority associated the experience to feelings of anxiety and restlessness. Implementing the *Smell-Memory Kit* in this process helps new patients to Mistral to open up in a relaxed and welcoming context. The *Smell-Memory Kit* and a series of smelling exercises facilitate the encounter between a new patient, their ‘buddy’ (an existing patient) and the clinician. The patient and buddy smell each molecule. With their eyes closed they are asked to smell and write down first impressions, feelings or memories triggered by the smell. They smell again, and expand or tell more about their recollections and experiences with each smell. In this manner, the exercises slowly lead to an exchange of memories and personal stories. As there is no right or wrong answer, it is simply the personal experience that matters; the process creates an objective, sheltered context where both patients are encouraged to talk openly about themselves.

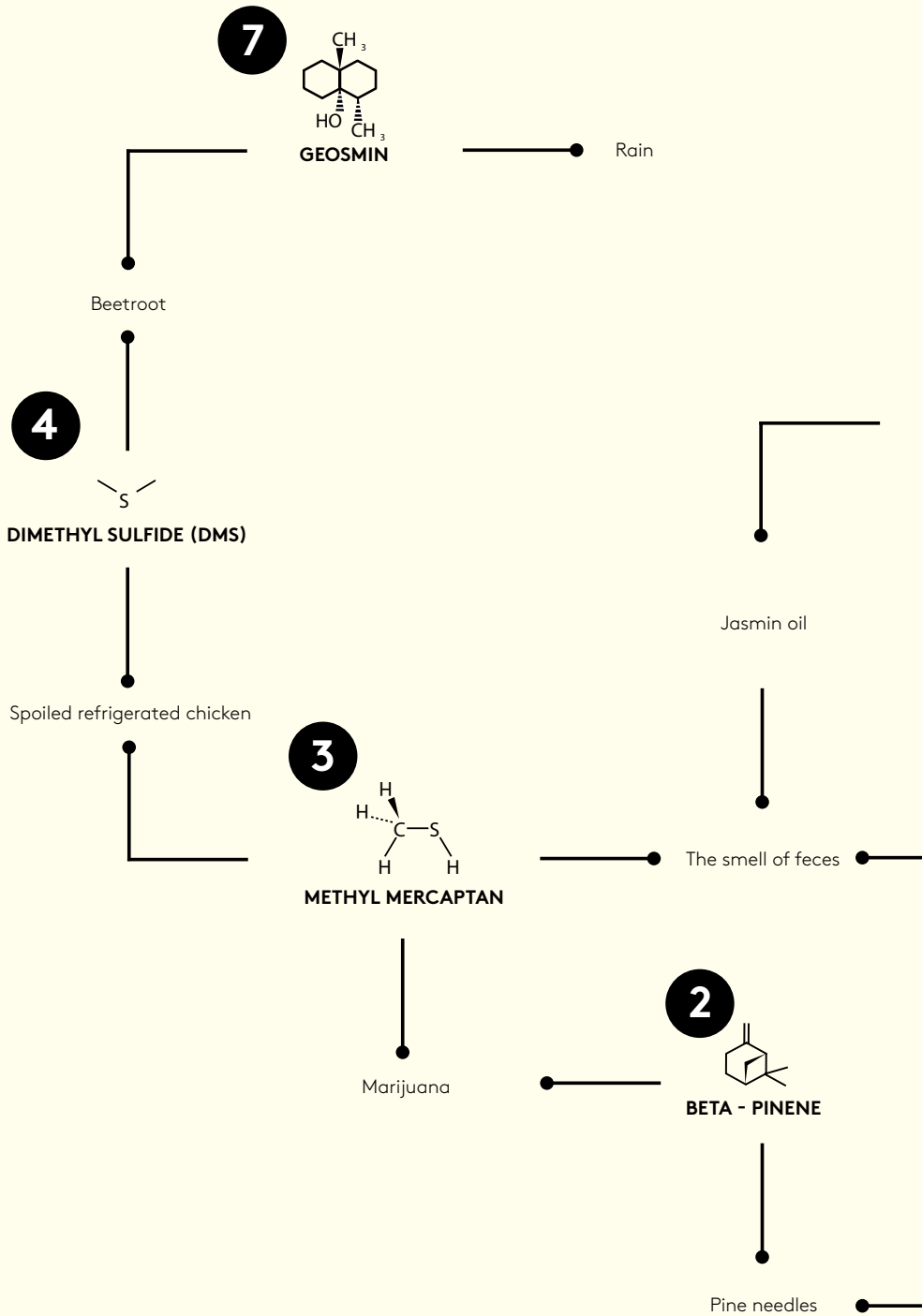
As one patient explained<sup>\*</sup>, the smells become “the object of the conversation” alleviating the pressure. The innate haziness of smell reveals not only specific moments or anecdotes from their previous life experiences, but also a personal take on the world, through which patients can contribute to their therapy’s official storyline.

\* The trigger of memories by sensory stimuli has become known as the ‘Proustian effect’ or the ‘Proust phenomenon’, since Marcel Proust first wrote about his childhood memories flooding back after dipping a madeleine in his tea in *Remembrance of Things Past*.

\*\* This reflection came from a pilot test of the Smell-Memory Kit with a new patient to Mistral, their buddy and a clinician, in June 2013. During the session, we also discussed the possibility of extending the use of the Smell-Memory Kit to other instances throughout their therapy. Both patient and buddy expressed positive emotions, claiming to know more about each other after the exercises.

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- [1] Spijkerman, R. and Cámara Leret, S. Talking Scents in *CRISP Magazine* #1. Lecturis: Eindhoven 2013.
- [2] Gilbert, A. *What the Nose Knows: The Science of Scent in Everyday Life*. Crown Publishers, (New York), 2008.
- [3] Herz RS. Perfume, in *Neurobiology of Sensation and Reward*. CRC Press, Boca Raton (FL), 2011. (Chapter 17). Available from: <http://www.ncbi.nlm.nih.gov/books/NBK92802/>

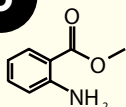


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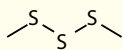
Food flavouring

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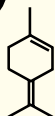


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Smell web used during the intake conversation. Each number matches a bottle containing the corresponding molecule, which is revealed by the clinician after the personal smell anecdotes are shared between patient and buddy.

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# Smell as a therapy tool

Sissel Tolaas in conversation with Susana Cámara Leret

Sissel Tolaas explores the world through the nose / via smell. With a background in mathematics, chemical science, linguistics, languages and visual art, her work shifts boundaries, making systems of smells a basis for communication. I meet with her to discuss the challenges and possibilities of smells in therapy, further reflecting on the experiences of addiction patients at Mistral rehabilitation clinic.

## The smell of potential

Sissel Tolaas

“The way I’ve been working with smell as a therapy tool is really to tailor-make smells for each person, based on each person’s history or the narratives I have at my disposal: it depends on whom I’m working for and how their whole overall situation is. I work on most cases with psychiatrists or psychologists who have access to more ‘inside information’. From these narratives I then create ‘smellscapes’ or ‘smell individuals’. This is done carefully because you can also cause the opposite reaction – the one linked with the reason the addiction started in the first place. It’s very tricky, because it can become emotional. It has to be approached very carefully with connoisseurs in the field. Smell is a plain tool – like a gameboy – a tool to play with. You can put some smells around a table and play around with them, but when you go into therapy it’s a different kind of field and you have to be very careful. Smell and memory is so efficient; if you do it wrong, you cause the opposite of what you want to gain.”

Susana Cámara Leret

“We chose to work at Mistral with smell in particular because it is so personalised: everybody has their own

experience and there is no right or wrong answer, which means you can talk about what you've experienced on an objective level."

S.T.

"That's if you take a random smell; you can talk about your experience or lack of it. If you start to use smell to trigger a specific memory as therapy – to track back to when the addiction started – that's a completely different story. For those sorts of projects, I'm there for therapeutic reasons, to trigger memories of what caused the problem, to replicate it via smell, train awareness beyond old prejudices. That's the only way smell can somehow work as a therapy tool. But who is going to make those smells? It's a lot of work! If we, in the future, have a scenario or a situation where this is the case, and smell can be used in this manner, we need a professional team that really understands the chemistry of smell and how you can compose it, so that we can create a narrative. I haven't done too much research in the field of addiction, but I can sort of imagine... how – as our senses are super alert and part of the therapy is to find the reason why the patient became addicted – or why the patient couldn't cope with certain things. Could smell help you to overcome those traumas? The only way I think it can help is that you train awareness towards that smell, from that very moment, by de-contextualising that smell from its (original) context.

Hopefully in the future it won't be surprising for patients and clinicians to use scent as an integrated part of therapy. The first step now is to make people aware about this; that it's not just about touching and speaking and playing, but that we care about all aspects of you: your nose and your taste and your touch; it's all important."

S.C.L.

"Slowly exposing them to different levels of the smell experience."

S.T.

“There is big potential. Like in post-traumatic stress. Not everybody gets addicted. But in order to find the smell you need people who have experience in linking not just abstract smells, which is mainly the case in our society (i.e. to make smells that cover up other smells), but somebody who’s been working with smell for some time. You need chemists and scientists who have access to the chemistry of smell, who are able to replicate or come up with smell solutions based on these personal smell narratives; the patients would also be telling these people their stories. That’s why a collaboration between smell scientists and psychiatrists is important.”

S.C.L.

“Creating a ‘smell print’ or portrait of the person?”

S.T.

“You look at what elements from their story are important and slowly try to trigger if smell can help. And if the situation causing the problem comes up, then you’ve got what smell triggered that moment. Then you have to come up with the methodology to de-contextualise the smell and talk about the memory again. You pair it with something positive, but each situation is different.”

## **How smell research might be brought further**

S.C.L.

“Smell is such an elite industry, so how can you bring it to the research level where you can implement it on a wider scale?”

S.T.

“That’s the tricky bit. So far the industry is not at this level; they don’t see the need because it doesn’t make money. An alternative is to come up with sufficient and precise

research to show the possibilities of this use of smell, for example leading to a scientific paper that proves that this specific molecule can be sold for this amount of money. It's about time that we look at flavours, smells and chemical components for other kinds of purposes and really put out some money to do serious research for different types of applications. There's a whole world that could benefit from that. That's what I do, but I'm just one little person and it's not possible to do your research without having access to the knowledge. Again we are talking about investment for the research, the headspace analysis, because it's a lot of money. So the more people who do interesting stuff in the field of smell, the more pressure there will be on the industry – I'm talking about those five, six companies that control everything on smell and taste on the entire planet. And it's fantastic research that could be used for other purposes!"

## **Smells trigger memory**

S.T.

"Smell is the most efficient tool to trigger memory, that's for sure. All aspects of it, in terms of traumas in the past. If you want to trigger that, smell is very efficient. Memory is also a learning tool. If you change your habits and learn the context of a smell you will get a reminder later in life by using it. Using the nose as a tool for play or communication is always efficient because there is no hierarchy, there are no rules: he's not better than her. And since smell is so individual, everybody's stories are fantastic, whether I know the smell or not; one always has some relation to it or has something to say about it."

S.C.L.

"As we experienced in Mistral, smells make people want to talk."

S.T.

“In general it’s very difficult to speak about smell. So if one manages to get a conversation at all around a smell, I think it’s a first step in a very important direction because people smell something and normally it stops at good, or bad. What’s most essential here is to develop a methodology where you trigger people to go beyond that. That’s why children are so fantastic; they have no prejudices and are very naïve but they have alert senses. Very often, when I do workshops with, let’s say Mercedes, there is a child as a kind of coach to show participants how it works. The older we get, the more (of this sensibility) we lose, because we don’t play enough. And we all know how fantastic it is to play! The nose is an incredibly good toy for this. When you have smell present, the more crazy the smells are, the more people have fun. I have not been in one situation where people are not on the floor from laughter when some smell got presented... and this would be 40, 50 or 60 year olds, you name it! Why is the smell of dog shit so funny? If I put up the smell of a rose, do people laugh? No! Essentially we’re not used to having these other, everyday smells presented to us like that. If you manage to focus on something unconventional, that’s a good way to find out a lot of things; there is a lot of potential in this through smell.”



# Attributing design research to care

Interview with Berend Hofman, healthcare psychologist at Mistral

Just after completing a last testing round of the *Smell-Memory Kit: The Molecules that Matter*, Susana Cámara Leret meets up with Berend Hofman, GZ-psychologist with whom she closely collaborated during her research at Mistral, clinic for youth addicts. Talking through their experiences of the collaboration, Cámara Leret recounts a few things the participants said during the testing of the kit. Quotes such as “It’s a great ice breaker!” and “Since you are asked to share your associations, it makes talking easier and you keep on talking,” immediately spring to mind.

Early on in her Research Associateship Cámara Leret visited Mistral. She was interested in researching the possibilities of using smell as a tool to offer new services for the rehabilitation clinic. Hofman: “I was immediately interested to use smell in a psychological process, because the act of smelling is very primal. It is processed by the brain differently than sound or sight. Smell has a direct impact on the limbic system and therefore easily triggers emotions. As such, smell is a great tool to use in therapy.”

The first meetings Cámara Leret and Hofman had were wild brainstorming sessions on how smell could be applied in the clinic. Both mention that the benefits of the project became clear over time. Cámara Leret: “The discussions I had with Berend really helped to shape the project.” Hofman: “A design process is different to a therapy trajectory, therefore it was a refreshing addition to our work: the work of a psychologist is very practical, whereas a design process initially involves much more talking and scoping the field.” Hofman helped Cámara Leret with the psychological terminology such as ‘modelling’. That is a very effective tool in psychology, which Cámara Leret attributed to the *Kindred Spirits series* – a series of creatures that live in the clinic, which respond to the mood of the patients and try to relieve it. (more information on page 47)

The initial discussions on ‘using smell’ developed into the *Smell-Memory Kit* comprising of eight different single-molecule scents. Each of these molecules are found in different smells (for instance the same molecule is found in faeces and spoiled refrigerated chicken) and therefore there is no definitive right or wrong

answer to what the molecules smell like. Hofman: “We left it up to the patients if they wanted to participate in the initial smelling sessions. I would ask if it would be okay if Susana joined them. They were all very eager to participate and try out a new step. Even the most anti-social patients wanted to be part of the experience. It was a learning curve how to use the kit and what questions we would ask. To guide the conversations between the patients, we chose to work with psychologists who are open to try new things.”

The final project consists of a smell box that Mistral will use for their intake sessions, discussions with the youth addicts and generally as an exciting new tool for therapy. Hofman: “The kit offers the perfect opportunity to conduct an introduction interview or an open discussion, and as such it helps us to get to know the patients. Furthermore, since everyone has different associations with smell, it also triggers conversations amongst the patients.”

Hofman elaborates on the special results the collaboration has revealed: “Care in the Netherlands has to be efficient. If an idea or project doesn’t enhance efficiency in the clinic, it would be marked as ‘frivolous’: every hour that’s not spent with the patients is not seen as productive. As a result, for these projects it is difficult to free up time or arrange funding and often they wouldn’t be developed further. Psychologists have a hard time defending their work, since research could also be about less good qualities of humanity, which often find incomprehension of society. Therefore, there could even be some kind of resistance within the psychology field towards projects that are not scientific from the outset or which are not based on laws and previous knowledge, which would be hard to prove with numbers.”

The clinic had worked with designers before, so did not have to be convinced that working with designers could lead to projects integrated in the clinic – beyond a new design for the living room, that is. Hofman was immediately enthusiastic to collaborate on the project: “Attributing design research to care is an interesting development. I really see the benefits of working with designers, because therapy hasn’t had many fresh influences recently. We do not use creative research tools, which – as we have proved – could be very important. If psychologists would try to make changes, it would be the ‘psychology way’ so it wouldn’t break with our routines and would therefore not lead to such interesting results. The *Smell-Memory Kit* is an interesting side-step that we are very eager to explore. In the future we may call in designers earlier on in the process, at the very moment we detect a problem.”



The sensory research was developed at the Mistral Rehabilitation Clinic in Den Haag, The Netherlands (image by: Daniel Gaciu)

# The Smell-Memory Kit: Diving for memories to share

Valentijn Visch

The *Smell-Memory Kit*, as developed by Susana Cámara Leret within the CRISP G-Motiv project, is an example of a Product Service System (PSS) in which a product is designed to increase the effect of an existing service. This PSS is result-oriented<sup>[1]</sup> which in this case means that the product remains in possession of the company and in which the user is mainly interested in the result of the service and less in the process of receiving the service. For the *Smell-Memory Kit* the service consisted of addiction treatment as provided to young addicts by the Mistral clinic, in The Hague, the Netherlands. Part of the treatment entailed linking, that is, ‘buddying’ a new patient to an existing patient within the program. The *Smell-Memory Kit* is used to enhance the process of buddying by persuading the participants (both new patient and buddy) to share stories.

The process of persuasion in the *Smell-Memory Kit* can be described using the Persuasive Game Design (PGD) model as developed by G-Motiv<sup>[5]</sup> – see Figure 1. The user occupies a central position in the model since the objective of PGD is to change the user’s behaviour; in the present context the aim is for an increased intensity of the user’s social relationship with the buddy. The means to change the behaviour are provided by game elements that move the user from a real world experience (the experience of daily life) into a game world experience (which is enjoyable, engaging, feels free and safe, and provides direct feedback). Game-elements are motivating elements that are typically used in games, such as rewards, competition, collaboration, chance or fantasy. With regard to the *Smell-Memory Kit*, the designed game-element is the memory-evoking smells.

While smells trigger personal episodic memories, but it may be difficult to verbalise the memories exactly. Smells may evoke a feeling of recognition but you may be unable to specify the content of the recognition by describing the cause of the smell or by remembering the fully related episode of the past. As such, smells may bring the user into a world of memories and carry the user away from his or her present world. Moreover, the experienced gap between sensing recognition and actually remembering it fully may function like a matching game-element.

That is, it motivates the (*Smell-Memory Kit*) participant to find the explicit matching memory of the experienced smell, by entering the world of personal episodic memories. This world of episodic memories is echoed here, where magic-realism author, Rushdie, uses the metaphor of oceans of stories and the river of time: Luka, “looked into the water and saw there the thousand thousand thousand and one different strands of liquid, flowing together, twining around and around one another, flowing in and out of another, and turning into a different thousand thousand thousand and one strands of liquid [...] the whole history of everything was flowing along before his very eyes, transformed into shining, mingling, multi-coloured story streams”<sup>[4]</sup>. In our scenario, the matching game would be to pick the right colour and streams to complete the multimodal episode that is activated<sup>[5]</sup> but is not fully recalled by the smell – for instance with regard to what you did, what you felt, what you wore, where you were, what you saw, with whom you were, and what you heard. The transfer effect of the *Smell-Memory Kit* consists of the increased social buddy relationship in terms of social interaction and social bonding<sup>[2]</sup>.

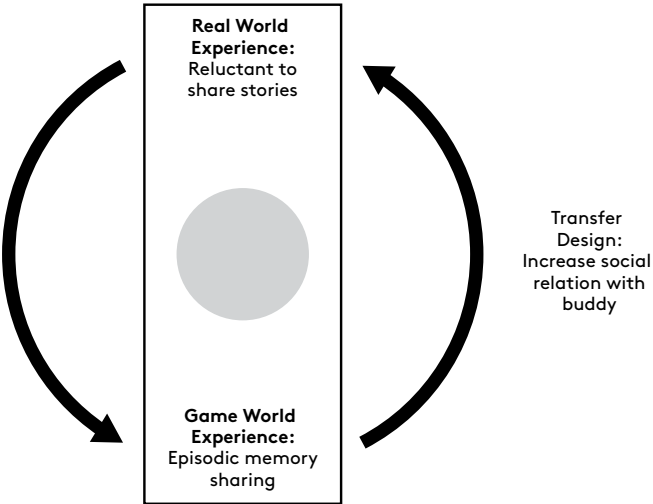


Figure 1:  
Application of the  
Persuasive Game  
Design model of the  
*Smell-Memory Kit*

Persuasive games, which could lead to behavioural changes in the real world, bring some ethical issues to the fore. With regard to the present context, the new Mistral patient might be unwilling to share personal stories to the assigned buddy because the stories may be shameful, or because he or she doesn’t yet know the buddy very well. However, the game-elements of the smell sensation as well as the

episodic memory retrieval might let the user temporarily forget the cause of her unwillingness to share. In the end, the patient might feel regret at ‘being tricked’ as if he or she was secretly slipped with some sort of ‘truth serum’. I believe that these hypothetical ethical problems can be covered by the following arguments. Firstly, the patient knows that the total treatment at Mistral will involve several modules that are all aimed to change the (addict’s) behaviour. A patient agrees to the behavioural change, and to be subject to therapeutic treatments targeted to effect this change. Secondly, the smell workshop is guided by a professional therapist who controls the memories that are told, with respect to the patient’s wellbeing, after the smell workshop. Thirdly, the client is informed about the game during the instruction, and can prepare for the session, and will thus not be ‘secretly tricked’ via scent. Finally, the patient remains in control about the sharing of any memories. A memory might be retrieved by the smells and the matching game, but once the memory is retrieved the patient is still in control about the sharing process; the patient might share only a part of it or make a small modification – in contrast to a truth serum. Summarised, the *Smell-Memory Kit* is exemplary of PGD and it is our hope that future research can validate the exact transfer effect on social relationships.

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## How would you like to interact with games in the future?

From the Future of  
Gaming, 2011 by:  
Latitude, International  
research consultancy  
[www.latd.com](http://www.latd.com)

**71%** I'd like if I could take action in games by **gesturing** or moving my body

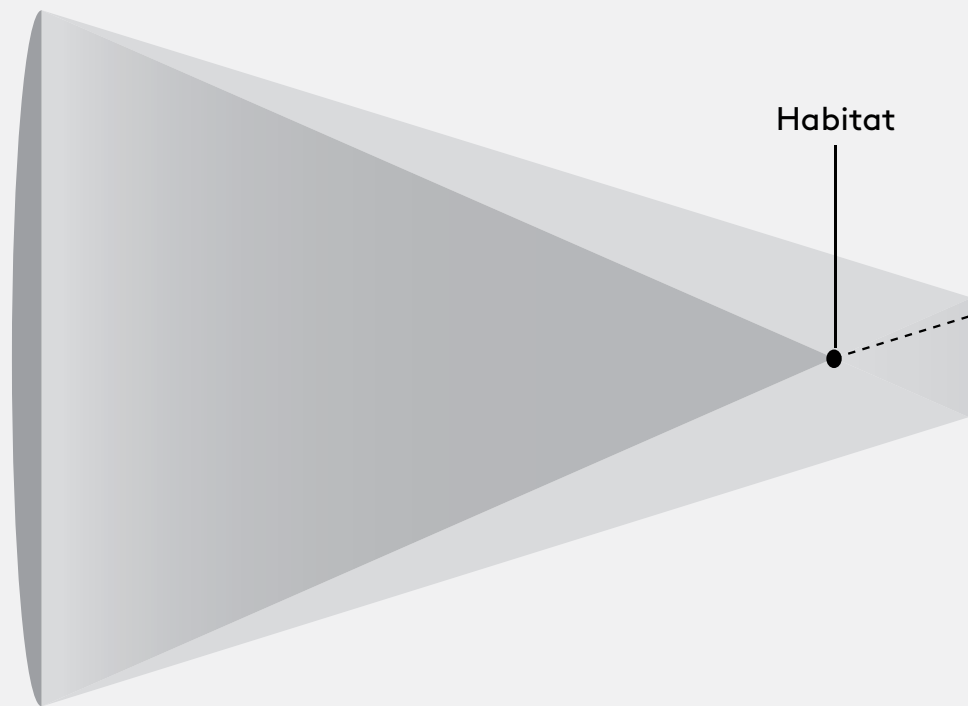
**56%** I'd like if **objects could sense** when I'm interacting with them and register that online or convey that information to other objects

**53%** I'd like to see **virtual environments** or digital content overlaid onto the real world

**44%** I'd like a game that I could interact with **just by thinking**

**43%** I'd like a game that automatically senses and **reacts to my mood** or bodily state

**38%** I'd like to see more games that register when I'm at a certain place or near a certain person

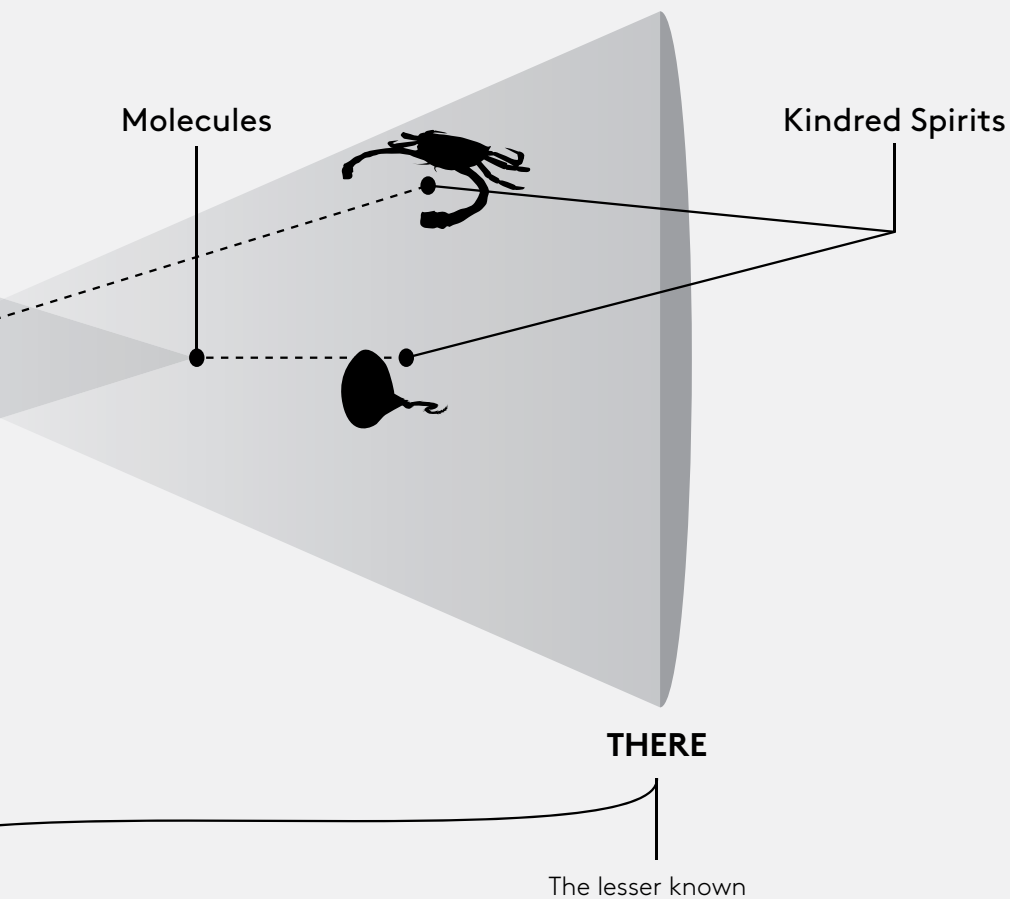


Habitat

**THEN**

Past addictions

**HERE**





# Design fictions rooted in the present

Ré Dubhthaigh

Susana Cámara Leret's work at the Readership in Strategic Creativity has developed along two parallel tracks – the first grounded in direct user engagement and observation realised as the *Smell-Memory Kit*, and the other which is more speculative, resulting in a set called *Kindred Spirits*. While at first it may seem there is little to link the two except a shared body of research, they are in fact deeply linked in both their intent and physical expression. These projects exist at different ends of an evolutionary spectrum; one anchored in the limits of a mundane present and the other in the possibilities of the future.

We can imagine the *Smell-Memory Kit* as a sort of distant ancestor of *Kindred Spirits*, separated by a thousand generations along an evolutionary pathway through synthetic biology, advanced robotics and behavioural psychology. This notion of evolution has emerged as key to Cámara Leret's work – using the language of nature to frame her response to the rehabilitation centre where she conducted her research, and its residents. In this metaphor, the clinic becomes a habitat that shapes species; they evolve to fulfil particular niches and respond to the wider ecosystem of human and non-human actors with whom they share the environment.

The starting point for much design fiction is a single technological innovation, extrapolating from this to expose potential impacts and challenges. However, *Kindred Spirits* has emerged using a more grounded approach, from engaging with real people in real circumstances, in time becoming companion species for the centre's residents. As outlined elsewhere in this volume, the idea of companion species is directly influenced by the work of Donna Haraway but also draws on the approach of UK design studio BERG in their development of novel consumer electronics. While their *little printer* device is often derided as a toy for the east London creative classes, we can similarly read it as an evolutionary stepping stone between the mobile phone in our pocket and the truly autonomous companion species\* embedded in homes and workplaces.

*Kindred Spirits* is one such autonomous companion, fantastic in appearance and behaviour existing within a clearly defined social and cultural world. By placing a set of these more fantastical creations in today's rehabilitation centre, Cámara

Leret provides rich design opportunities to stretch and shape the present. This is not an imagined dystopia or proximate future, but a community and place in The Hague, in 2012/13. Like fairy folk or medieval angels, her creatures allow us to exploit fantasy and talk about the less explicit behaviours and motivations of the residents. In turn, these new insights can inform interventions in the present day, such as the *Smell-Memory Kit*.

The layering of this speculative otherworld over our present reality is a useful design research approach, preventing us from feeling trapped in present constraints or losing ourselves completely to a 'science-fictionalised' discourse. Like the 'Game World' as described by Valentijn Visch (p 28), the interplay between the mundane and the fantastic allows us to do things we normally wouldn't do.

Designers such as Cámara Leret fully exploit such an interstitial position, by bridging the immediate and the speculative, embracing both pragmatic experimentation and critical reflection. Designing at both ends of the spectrum at the same time advances the present and the future. Within a project such as *Kindred Spirits*, Cámara Leret's work can help the wider team uncover new avenues or opportunities to explore. The *Smell-Memory Kit* and *Kindred Spirits* balance real needs and imagined desires for the benefit of the designer, project partners, centre staff and residents alike.

\* a term coined by Donna Haraway as per the title of her famous treatise: *'The Companion Species Manifesto: Dogs, People, and Significant Otherness'* (Prickly Paradigm Press (April 1, 2003)).

# Design fictions: stories from the ‘new now’

A dialogue between Susana Cámara Leret and Anab Jain, led by Bas Raijmakers

Anab Jain, founder of Superflux, a multidisciplinary design company based in London and Ahmedabad, expresses her passion for speculative design. An approach closely linked to *Kindred Spirits*. Anab participated in the *Open Design Space A Message for Oblivion*; a crash course on design research, led by Cámara Leret at Design Academy Eindhoven, where the notion of using fictions and fantasy as tools to construct possible futures was introduced. In an interview led by Bas Raijmakers, these two design researchers explore the potential of design fictions, storytelling, and the power and limits of design languages in communicating possible futures from the ‘new now’.

Speculative design focusses on creating products for the mind in order to empower people, start a critical debate or explore future scenarios. Both Anab Jain of Superflux, an agency that is well known for its speculative approach, and Susana Cámara Leret strongly believe that design fictions can help people cope with uncertainties, providing a channel to engage with future situations and critically reflect on current society. Design’s wide set of methods and tools can provide a powerful means to explore these experiences.

**Anab Jain**

“What storytelling techniques allow us to do is create a compelling immersion into a credible, near-future world. By using rich, evocative methods of storytelling we are presenting the diverse possibilities that the future holds, in a more emotional way. Creating experiential worlds, we try to produce profound insights into the needs and desires that will drive near-future products and services. Our starting point is based on research to understand emotionally, and on an experiential level, what it might feel like to live in these worlds: how might we interact with their technologies, what sorts of products and services might be used, will they make us comfortable, will they make us angry? Storytelling is a very powerful means to do that.”

**Bas Raijmakers**

“... As opposed to a more rational approach to thinking about the future. Would you say then that these stories are *from* the future, rather than *about* the future?”

**A.J.**

“They are from the future but not necessarily that far off into the future to feel like science-fiction. They are linked to current day realities, extrapolating present trends, drawing on the differences between pure science-fiction and something we are designing today. Any technology we talk about is already either in the lab or in the marketplace. We are interested in the interactions and the experiences with or surrounding these technologies. We tend to use the term *design futurescaping*. The interest is in understanding how to make things that tell stories, to create differences of near-future worlds.”

**B.R.**

“Was the relationship between storytelling and experience also explored within the design research project *Kindred Spirits*?”

**Susana Cámara Leret**

“The experiential level was key throughout the process. We were working within a clinic for addiction and rehabilitation, with patients 15 to 25 years old, who live there over a period of four to six months. From the start, we were immersed in a scientific process with our project collaborators who were very much focussed on extracting facts from the surrounding context and realities of the patients. The use of storytelling allowed the patients to provide a different storyline to that which they are normally confronted with, through scientific research within the clinic. This allows them to explain their experiences, and creates tools to address these more critically.

In this context of the clinic, sharing stories is very relevant to optimise therapy. For the clinicians, it was

important to understand other possibilities to talk about these stories in a less confronting manner. We realised that smell could be a very interesting means to bring out these abstract narratives, as it is so fuzzy and helps you bring back abstract memories from your past. Memories with many emotional associations paired to the smells. In this manner it [smell] facilitated talking about unpleasant experiences from a more sheltered, abstract context. So we began by researching and understanding these stories, asking them to create at first narratives from random scents, but also by analysing the space of the clinic on a sensory level and walking through these personal sensory maps of the clinic.

These experiences outlined that there was a clash between their perception of the clinic and the time spent in these spaces. We grounded the speculative designs in these experiences, by co-creating with the patients a series of fictional companions (aka *Kindred Spirits*) who would react to their behaviours at each location, by populating the space. These highlighted the everyday interactions that take place between the patients, and between the patients and technological devices. We used the patients' personal experiences to create this fictional world, which facilitated their thinking about the therapy process, through an imagined relationship with a fictional creature."

## **Empowering and engaging multiple futures**

**B.R.**

"In this speculative work there is in some way somewhere an empowering of people, which aims to get them to engage with the present in more critical ways and to speculate on how it could be different."

**A.J.**

"There is always the question of how much people know and ask about it, how much does it impact on us? There are two sides to it, as you are creating the work primarily

to get people to start thinking and questioning the status quo. Not all of that is translated into immediate action. Firstly, it allows you to create an atmosphere of critical thinking, a questioning of technology as something that is not always positive in our lives. Secondly, this approach saves resources and investments for potential clients. This is because in a week they can have many prototypes, quickly made near-future worlds, and understand the potentials of these worlds, seeing the pros and cons before going into one. Therefore, there is an element of risk that we think about, which is why we say ‘we design for risk’. We keep in mind the changes and the shifts around the cultural trends before we start designing something. There are many ways in which this practice bridges the gap between pure foresight work and pure service or interaction design.”

S.C.L.

“In a previous discussion with Berend Hofman, clinician and occupational psychologist from Mistral, he outlined that changes or innovations in their practice were very slow. He highlighted that relevant principles to his profession and delivering care emerged from these quick, iterative prototypes that were developed alongside the patients’ experiences.”

B.R.

“I suppose it showed him another way of working with the future and testing assumptions. Could we say that, in this type of situation, you both attempt to multiply the future as opposed to reducing uncertainties?”

A.J.

“Absolutely. Most people have trouble dealing with the idea of one future, let alone multiple futures. There are very short-sighted roadmaps out there, but there isn’t one future, there is never going to be this one future. When we look at the methods applied by foresight and scenario planning organisations to think about the future, we find

that there are so many overlaps and our design method – perhaps a more organic approach – is more effective in creating these multiple futures. So more creative design methods need to be applied for organisations that are really forward thinking.”

B.R.

“In fact I believe in (the) Dutch (language), the plural of future doesn’t even exist! You can say ‘future visions’, but not ‘futures’, so imagine the difficulty of explaining this idea within a Dutch context. And within these plural, multiple futures, critical engagement and empowerment go hand in hand – you have to critically engage to empower.”

A.J.

“You have to critically engage and empower people because there is not one road to follow. For us, the future is so locked in ‘pay off your mortgage’, ‘make sure your child gets a proper education’; we plan our lives in such a linear way that to get people to think of multiple possibilities at each junction is quite difficult, as we did in a project called *The Power of 8*, where we realised that there is quite a lot of conflict, as everyone has their own vision of the future. There is this possessiveness of the future. But once people get their head around this, it’s quite empowering because they begin to realise its possibilities. We try to make clear that there is a junction at each section in life.

Also, at a larger socio-cultural level things are already happening that are actually stranger than the design fictions we work with; we’ve termed this the ‘strange now’. So what we are interested in doing is to pull out some of these themes and extrapolate them again to the future. For example in a recent project on synthetic biology we are not looking at the future of technology, but at the implications on healthcare. We have created a scenario where the National Health Service becomes the National Health Insurance. As we all know, people’s genetic profiles become measurable. Based on your risk for disease you pay insurance

contributions, so you are paying for your future healthcare needs. This scenario scares people, but in fact it's already happening at an invisible, quiet level."

## **The place of technology and the role of design**

**B.R.**

"This tactic is also a means to empower people to think about alternatives, as those parts that people consider 'the future' are already here, which brings us back to allowing people to experience that, instead of telling them about it. Is this what the power of design can do?"

**S.C.L.**

"It very much materialises that possibility, allowing a direct experience of processes that are already on-going in our surroundings. In the context of *Mistral*, the interactions materialised through the *Kindred Spirits* series came from real processes that were already taking place in that context; patients needed focus points to create awareness and alert themselves and others when group dynamics led to exacerbated behaviour. On another level, we regularly carry devices that accomplish not only an expected technological function, but are also gaining in emotional and psychological meaning. Speculative design provides a lens through which you can look at the present more critically. It's not about a massive leap, but finding a small interaction to re-address existing products and services."

**A.J.**

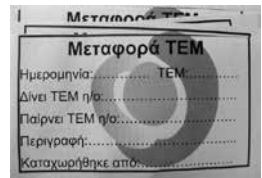
"Power is the richness of the medium, the richness of the techniques that we can use from hypothetical products, to multiple media, to storytelling, to prototyping. We have a wide and rich set of methods and tools, as designers, to be able to create these experiences. The drawback is that we haven't been able to articulate the real value of it rigorously. We, as designers, are not often the most articulate.

We tend to rely a lot on our design skills and our ability to show, but perhaps we can begin to put more focus in creating a space for articulation around these ideas. How do we get the attention of people / strategic decision-makers to truly recognise the value of this way of thinking and designing? Most people are scared of the risk that such a proposition could bring in.”

B.R.

“Perhaps this is probably not going to be a design language, as the design thinking movement also has its limitations; its role is to bring more design language at the strategic level but it doesn’t accomplish to make this speculative work understood. How do these speculative stories find their way back into everyday life?”

TEM, an alternative currency introduced in Volos, Greece. An example of recent grass-roots strategies developed by communities struggling in the financial crisis.



S.C.L.

“It’s no longer the role of the designer to bring back these ideas into society. It’s something that emerges collectively. As we have seen with recent social movements due to the economic crisis, like the creation of a new currency in Greece or the political situation in Spain. The crisis has brought a shift in values, so people are re-addressing what kind of futures they would want to live in. More and more they have an active role within these discussions, by actively participating in these movements.”

B.R.

“The crisis has opened up multiple futures. There’s also an understanding that the developments we thought we were in perhaps were no longer working, and we have hit the bottom at some point. What would be the role of technology within such a situation?”

A.J.

“Technology, in terms of technological tools and cheap access to them, has meant a sort of empowerment. Things that make the ‘invisible visible’, things that might not have been seen before, now come through the Twitter feeds. Suddenly there’s a whole new level of transparency through the tools we have. On another level, technologies can be re-used, hacked and adapted in unpredictable ways. This access to tools democratises technologies but also results in a loss of control: where there is 3D printing you also have 3D printed guns. The problem is that it is always presented as the shiny thing, but perhaps its role will also become more critical. I feel technology is more like ‘the material’ whilst design is ‘the medium’. We can shape that material by questioning it and showing the various sides of it. That’s the role of futurescaping: hypothetical, multiple, alternate worlds. Bruce Sterling, the science-fiction and design critic, uses the term ‘diegetic prototypes’; creating worlds which become diegetic prototype bodies, within which these various forms of technology will inhabit. It is a question of the place of technology versus the role of design.”



30,000 people take over the Plaza del Sol in Madrid, during the Indignados revolts in 2011

# From 'Notes of a Sports Writer's Daughter'

Donna Haraway

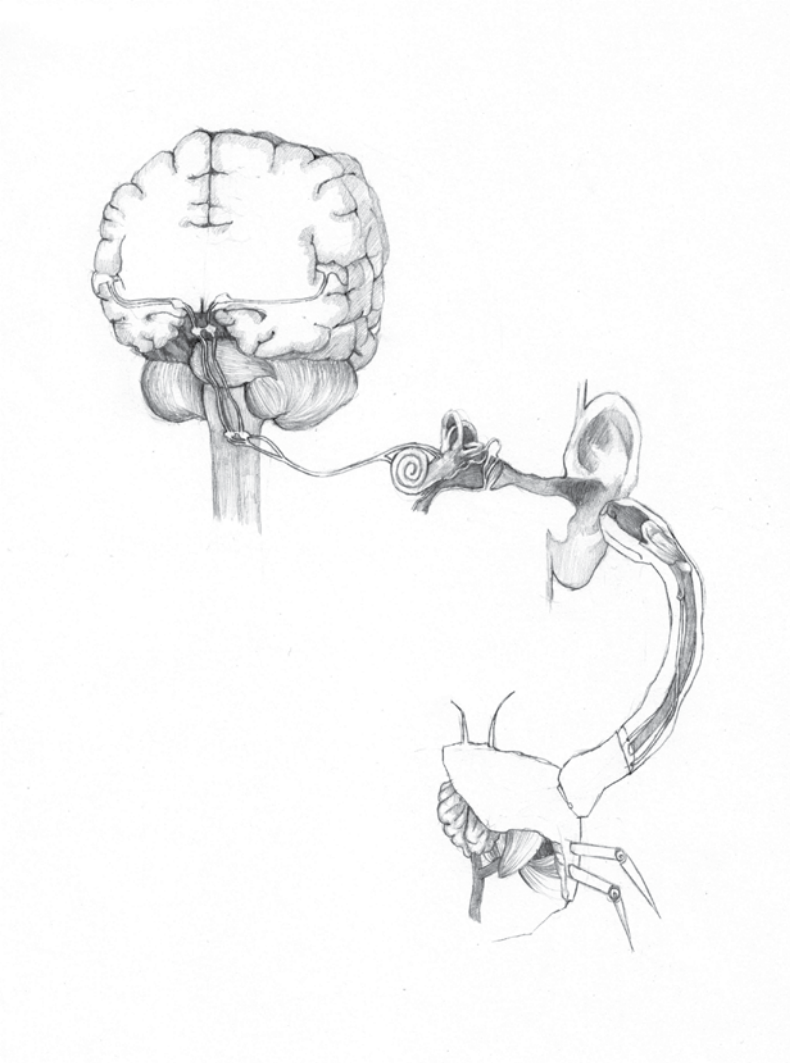
Ms Cayenne Pepper continues to colonise all my cells – a sure case of what the biologist Lynn Margulis calls symbiogenesis. I bet if you checked our DNA, you'd find some potent transfections between us. Her saliva must have the viral vectors. Surely, her darter-tongue kisses have been irresistible. Even though we share placement in the phylum of vertebrates, we inhabit not just different genera and divergent families, but altogether different orders.

How would we sort things out? Canid, hominid; pet, professor; bitch, woman; animal, human; athlete, handler. One of us has a microchip, injected under her neck skin for identification; the other has a photo ID California driver's licence. One of us has a written record of her ancestors for twenty generations; one of us does not know her great grandparents' names. One of us, product of a vast genetic mixture, is called 'pure-bred'. One of us, equally product of a vast mixture, is called 'white'. Each of these names designates a racial discourse, and we both inherit their consequences in our flesh.

One of us is at the cusp of flaming, youthful, physical achievement; the other is lusty but over the bill. And we play a team sport called agility on the same expropriated Native land where Cayenne's ancestors herded merino sheep. These sheep were imported from the already colonial pastoral economy of Australia to feed the California Gold Rush 49ers. In layers of history, layers of biology, layers of naturecultures, complexity is the name of our game. We are both the freedom-hungry offspring of conquest, products of white settler colonies, leaping over hurdles and crawling through tunnels on the playing field.

I'm sure our genomes are more alike than they should be. There must be some molecular record of our touch in the codes of living that will leave traces in the world, no matter that we are each reproductively silenced females, one by age, one by surgery. Her red merle Australian Shepherd's quick and lithe tongue has swabbed the tissues of my tonsils, with all their eager immune system receptors. Who knows where my chemical receptors carried her messages, or what she took from my cellular system for distinguishing self from other and binding outside to inside?

We have had forbidden conversation; we have had oral intercourse; we are bound in telling story upon story with nothing but the facts. We are training each other in acts of communication we barely understand. We are, constitutively, companion species. We make each other up, in the flesh. Significantly other to each other, in specific difference, we signify in the flesh a nasty development infection called love. This love is an historical aberration and a naturalcultural legacy.



# The Kindred Spirits Series

Susana Cámara Leret

The *Kindred Spirits series* consists of design fictions proposals that explore current relationships between patients from Mistral rehabilitation clinic, staff and their facility. The series presents two design outcomes, co-created with the patients from the clinic. These *Kindred Spirits* were inspired by the patients' daily experiences, aiming to envision and understand alternate possibilities for the systems and services offered in the clinic.

Design fictions can challenge existing preconceptions regarding the use of objects and their environments. The staged interactions these design artefacts present often lead to critical discussions, which expand on the role of technology in society, and consider wider needs and expectations derived from its implementation. The *Kindred Spirits series* contextualises this discussion, exploring the creation of collective future visions by embedding the design process within the everyday experiences of the patients.

The work began through sensory interviews, where each patient was asked to draw a map of the clinic's location and select three random spaces, based on their smell, sound and colour. Photographing, collecting and recording different samples of smells, sounds and personal anecdotes at each location, we walked through the clinic whilst discussing individual experiences. These exercises show that patients' perceptions of the clinic often clash with the activities held there: the joint living / dining room for example, where patients spend 80% of their time, was perceived as the most stressful and anxiety causing area by the majority, due to an excessive amount of noise.

The insights on the sensory landscape of Mistral prompted a series of creative, speculative sessions. These did not aim to find a solution for the patients' personal afflictions, but hoped to provide the necessary distance and objectivity to ignite a critical reflection on the clinic's environment. The idea of 'focus points' emerged, as interventions in the different spaces that could provide a physical / mental space for reflection and introspection. Inspired by Matt Jones' (BERG) ideas on the behaviour of sensate devices<sup>[1]</sup> and notions of significant otherness from

Donna Haraway's *Companion Species manifesto*<sup>[2]</sup>, we proceeded to explore the kind of fictional and hybrid 'beings' that could populate such zones.

Imagining the kind of interactions that could result from living alongside these fictional species, we began to flesh out the concept of the *Kindred Spirits*, focussing on commonly overlooked behaviours of the patients in relation to their environment and to each other. The term 'kindred spirits' is an expression in the English language that alludes to someone who shares beliefs, attitudes, feelings, or features with oneself. Each of the *Kindred Spirits* therefore discloses a different set of ordinary encounters that reveal implicit desires and needs of the patients.

The following design proposals metaphorically represent two circumstances and conditions that patients encounter in Mistral. Each Kindred Spirit was materialised with the collaboration of medical illustrator, Maartje Kunen. Imagining these daily encounters in the context of Mistral provided the patients and staff with the aforementioned 'focus points', to collectively address desired behavioural patterns and routines, building confidence in the treatment and rehabilitation.

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## Kindred Spirits

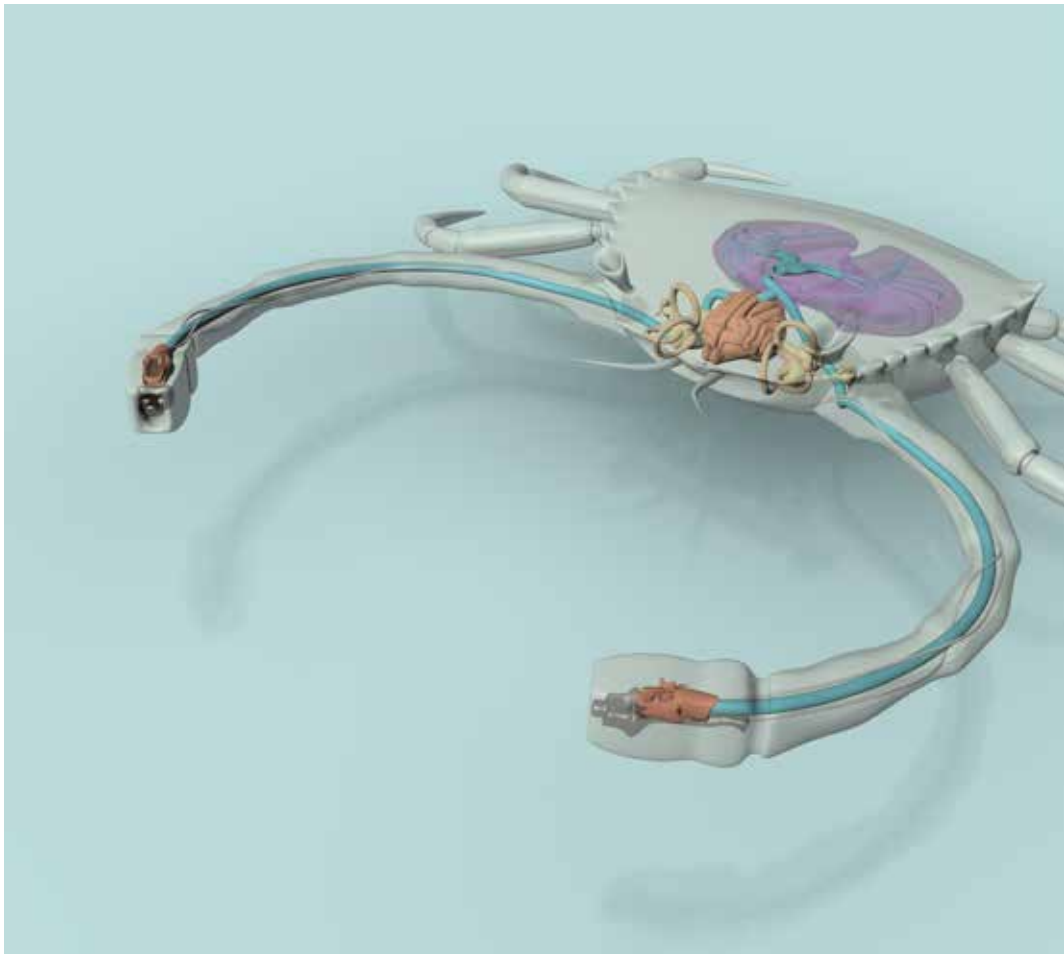
### *The Story*

Efforts to free our technological devices from the constraints of human resemblance point to increasingly sophisticated and animated sensing tools. The inclusion of biological elements—such as cells, proteins or molecules into sensing technologies and advanced software – filters natural evolutionary processes to concrete needs, which suggest new relationships with these agents. In understanding the world around them, these hybrid ‘companion species’ now watch, smell and listen to and for us. But what happens when technology claims humans as its own?

Evolved into physical / digital extensions of ourselves, they are offspring of our own compulsions, with acquired obsessions that inform new interactions, as they unintentionally design our own evolution.



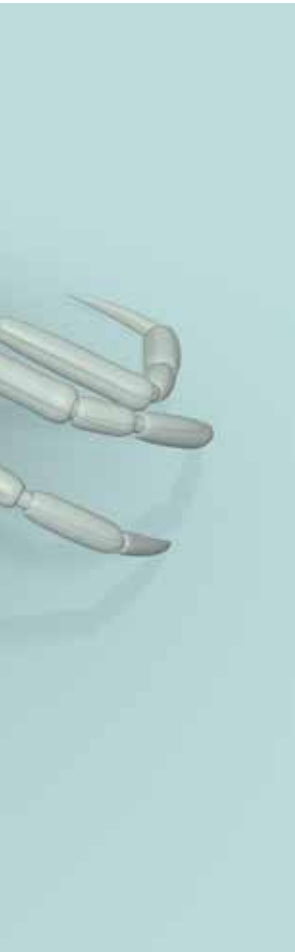
Listening to it is relaxing as it releases frequencies that induce alpha brainwaves, which help to calm down



## *“Sometimes you can’t hear your own mind”*

(Mistral patient, 2013)

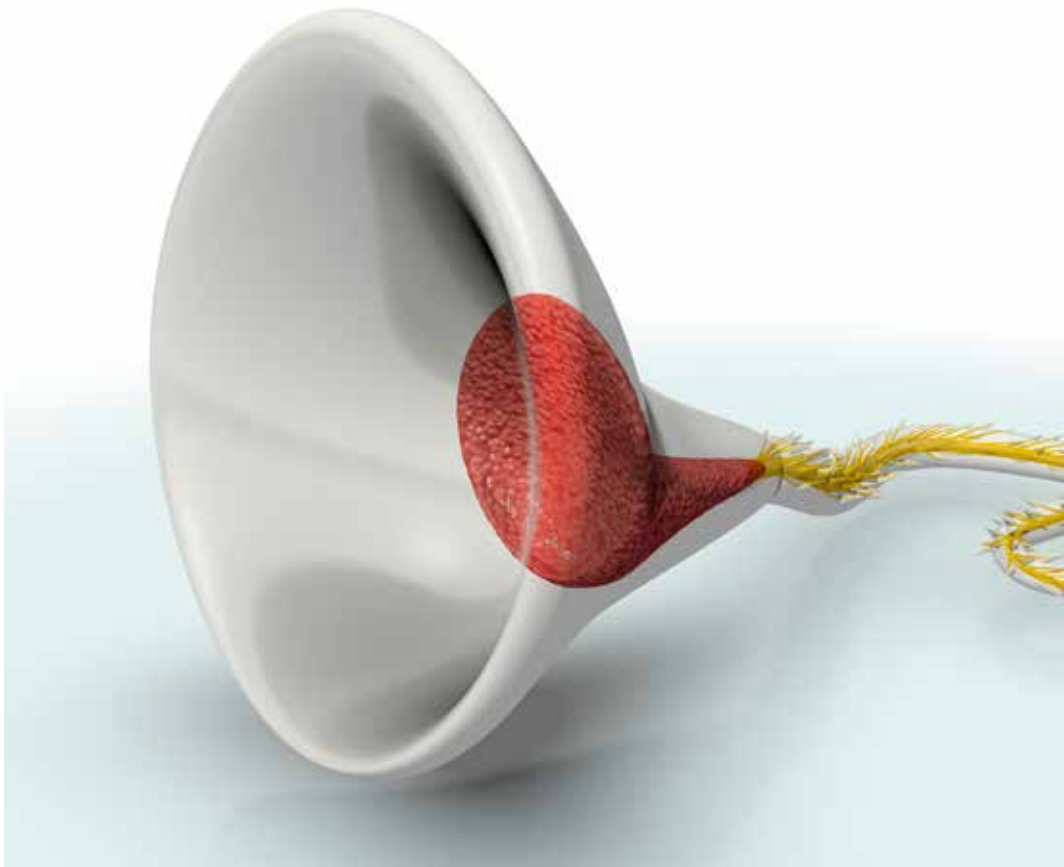
“Spending time in the living room is sometimes difficult; there is too much noise and that has become disturbing to us [the patients]. We all meet there and everyone talks at the same time, which leads to people yelling over each other’s voices. Unable to relax, you often need to leave the space because it’s difficult to concentrate on your own thoughts. ‘Hertzog’ reacts to sounds. When disturbed with the excess noise, it crawls out of its resting place, emitting different sounds from each extremity. When I pick it up and listen to it, it calms us both. I hear a beating tone, as if both frequencies emitted by Hertzog were mixed by my brain; it relaxes me and the sound soothes my thoughts...”



Anatomical Illustration of  
Hertzog by Maartje Kunen  
revealing its biotechnological  
constitution



This Kindred Spirit listens in on our conversations. It samples the air and releases molecules that enhance or block specific human olfactory receptors, influencing mood and behaviour



## *“Smelling makes you want to talk”*

(Berend Hofman, Mistral 2013)

“There is a small room in which we have our first meeting in Mistral. The clinicians ask to talk about yourself and what you want to achieve here, but this causes stress. The room has a window that does not open so the air feels dense and uncomfortable. ‘Gaz’ likes to lie here and listen in to our conversations. Its tail is full of nerve endings and it has a highly evolved sense of smell. Sometimes the conversations can get stressful and you become tense talking about yourself. After some time, you calm down. Then you realise that the smell has changed in the room... It’s softer, similar to Zwitsal [baby soap]; it reminds me of my little brothers. We start to talk about the smell...”



Anatomical Illustration of Gaz  
by Maartje Kunen revealing its  
sensory constitution



# Sampling and Questioning: Re-imagining Design Education

Catelijne van Middelkoop

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Introduction by Bas Raijmakers

Open Design Spaces (ODS) are short courses for design students spanning four Wednesdays, in which students can be temporarily part of one of the design research projects at the academy. Susana Cámara Leret organised an ODS as part of her Research Associateship, focusing on design researching with smell. These courses are held for Design Academy Eindhoven students who respond to an open call, as an elective part of their education. Research Associates involve a Design Academy tutor to get support in the education and at the same time offer an opportunity to them to experience design research from within. External experts are invited for guest lectures, workshops or 'crits' of student work created in the Open Design Spaces in an effort to offer different perspectives on the design research topic. These short courses are an example of how students can be confronted with issues, such as the ones outlined in this publication (new roles for designers, using various (design) research methods, and so on). Responses of students and tutors to the Open Design Spaces are a valuable way to try to understand what the implications for design education could be in terms of both topics and skills to teach. On the one hand, designers are well positioned to take on a more strategic role. They possess a range of skills to explore materials deeply, such as smell for instance, and then create a concrete result from that investigation, which has been invaluable in the role Susana Cámara Leret has picked up with her work within CRISP. On this level, undertaking research and designing are already connected in a very fruitful way in design education, in particular in schools like Design Academy Eindhoven. On the other hand, much less common in design education are the analytical skills needed to investigate the situations with which designers intervene. In design schools, intuition is often accepted as the single starting point for creation.

Intuition is crucial in creativity and design, but when operating on strategic levels, it is not enough. To be able to have conversations with the people involved in

the situations where design interventions are anticipated, these situations need to be fully understood in such a way that it is possible to discuss them with the people living in these situations. Creating this understanding and starting these conversations with the people involved, in an empathetic way, is a requirement that is not always supported by the skill-set designers develop during their training. When such training is based more on artistic approaches aimed at discovering your own identity as a designer, skills like analysis, reflection and empathy are less prominently developed. Yet, for designers who wish to play a more strategic role, analysis, reflection and empathy are skills to develop on top of both intuition and an artistic identity.

Catelijne van Middelkoop, tutor at the Open Design Space, *A Message for Oblivion*, and coordinator of the Man and Communication department at Design Academy Eindhoven, sketches her thoughts on how Open Design Spaces may be integrated into regular (design) education.

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Often accustomed to the production of visual and tangible outcomes, the students who enrolled in the *A Message for Oblivion* Open Design Space (ODS) found themselves thrown into the deep end as they discovered the potential of scent as a tool in their design process. “Can we learn anything from the past that might help us manage our addictions in a distant future? Have you ever thought what tools we could devise to explain to our future generations why we have sometimes failed? Instead of sending out detailed messages, what other ways could we choose to communicate?”

Instead of designing a fixed end-state – a widely prevalent approach to solving design problems – through creating engaging contexts in the present, the objective of the ODS was to develop services and devices which would trigger future interactions between users. Although the course was initially focussed on a specific target group – young addicts – it soon became clear that by introducing scent, an often overlooked and ill-explored aspect of human experience (and core faculty for exploring the world) into an educational context, a much larger field of potential correlations was open to investigate.

### **Design Academy Eindhoven teaching legacy**

Education at Design Academy Eindhoven (DAE), partially due to the media success of the annual Graduation Show as well as its recurring exhibitions at Milan’s famed *Salone del Mobile*, has to a large degree focussed on the presentation of a finished end product/result. This emphasis sometimes creates an asymmetric pull of attention, affecting process and discovery. Initiatives to reinvent design education such as the Open Design Spaces, but also the renewed program of the ‘Propaedeutic Year’ (introductory first-year) and the new ‘Lab’ (introduced in 2013-2014), give students and educators alike a chance to re-think the essence of design as well as the value and role of its entire process: from research, theory and reflection, to sketching, implementing, executing and editing.

### **Open Design Space in the educational system**

In its attempt to shine a new and welcome light on educational renewal, the ODS offers a worthy format to explore a (rather) specific topic and create knowledge with students, as well as empowering them to develop new skills. In order to reach this goal a change in mentality is required, one which will enable a shift in general focus from merely teaching and learning the ‘Software Package of Today’



to actually understanding and developing your own (digital) tools. Technique in itself is just a skill; triggering the imagination and sharing this with others is key.

Theory and research can seem dry, especially when presented outside of the academic context and to audiences less familiar with the content in question. Visualising the importance of the entire process does not only provide a point of entry to different (and even new) audiences, but also enables the designer to encounter and recognise innovative possibilities along the way. The tools which are presently available highlight the essence of prototyping and the added value of iteration, specifically tangible and visual steps to support a narrative or deepen a concept. Prototyping can create and validate proof as well as trigger new possibilities. The role of objects extends from dreams to finished products, to supporting actors in a story, to visual signifiers and translators of complex matter and cultural meaning. As this hierarchy is being questioned, new grounds unfold. Utopian doodles, prototypes, props and tools, designers and engineers, hackers and painters... the world has become one big open source of potential.

Although each participant had his or her own individual expectations regarding the outcome of the ODS, the students expressed interest in a longer course to tackle some of the spin-off design problems encountered along the way. This intense sampler of components confronted participants with other fields of research and design, as well as the chance to experience established and experimental approaches to specific questions and needs. Not only the participants, but also the tutors and external professionals benefitted from this.

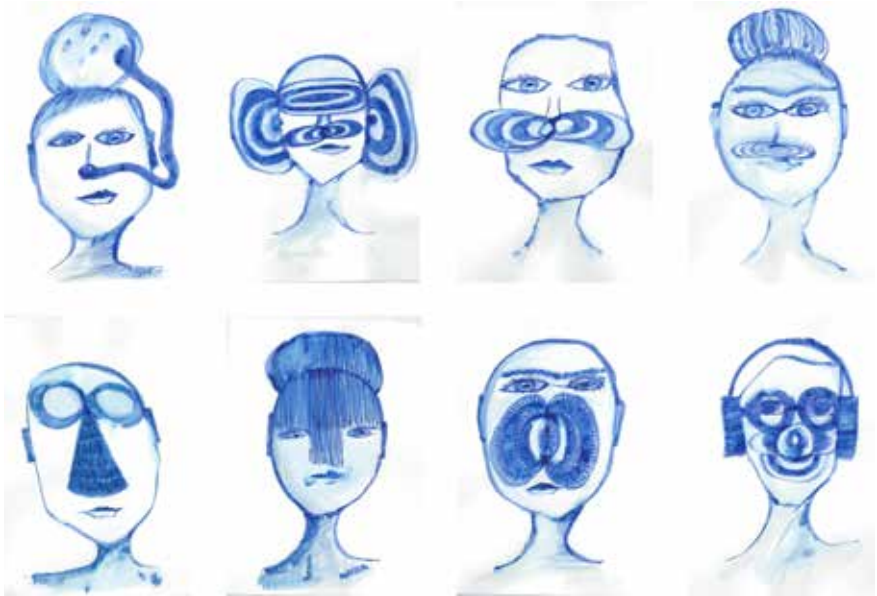
As the open call for participation in the ODS extended beyond the walls of the Design Academy it created a welcome extension of the world and experience of the academy's students – and their possibilities. They were joined by students from Eindhoven University of Technology and Tilburg University's Social Science faculty. Driven by personal interests, triggered by the possibility to discover the unknown, students were inspired to refine their futures as designers. Critical and aware of their capabilities, they are capable of finding paths through choices available in our on and off-line worlds.

### **Education on demand**

The previous examples show that the ODS is a constructive way to re-imagine what design education could be, as a catalyst of associative research and search

engine for the less obvious or travelled path. Hypothetical scenarios that came forward from the students' work in the ODS from 'Smell Conspiracies' to an 'Esperanto of Smell', allowed us to follow our intuition and ignore our common sense, to mix fact with fiction and observe that from such ingredients there is a viable path to developing new strategies – one of the key components that enable design education's journey.

Now imagine the next step in design education and the integration of a *truly* open design space in which a form of 'education on demand' will become a reality for all students. Not driven or held back by commercial interest or ways of the past, but urged by a hunger from within and possibilities in the world outside, utilising means that connect to everyday needs and individualised empowerment, possibility and the capacity to aspire. An open space in which students demand and are granted a larger say, co-authorship and choice in what they would like to learn. A lab in which they accept the responsibilities that come along with curating and editing this freedom, which allows and stimulates you to define your own role in the giant network of which we are all part. Educators will continue to do what they do well – give guidance and advice – but also are provoked to become passionate students themselves, once more.



Pleun van Dijk, *Nose Accessories*.  
Addressing the lack of accessories for the nose, Pleun searched for forms which could provide an aesthetic value and protection in a future where the nose is exploited for aesthetic, commercial, political or security reasons.



Megan Bloemsmma's *Airpocalypse* explores a world of saturated scents (image from Ai Wei Wei).



Chloé Rutzerveld's *Oma Seriri* speculates on future rituals of personal body odour entrapment, creating an olfactory memories of past life experiences.



# Collaboration and Speculation

Tobie Kerridge

## Designers speculating while collaborating

A distinctive feature of CRISP is that it provides a platform to support Research Associates in undertaking partnerships with diverse organisations<sup>[4]</sup>. Design practitioners are being trained to be researchers, and this entails that the designers reconsider their practice in relation to the requirements of a partner organisation. In this short essay I discuss the features of a speculative approach to design in such interdisciplinary settings.

Reflecting upon her role with CRISP's G-Motiv project, Susana Cámara Leret outlines a diverse set of collaborators<sup>[5]</sup>. She acknowledges support from the governmental department that funded the CRISP programme, the mentorship of colleagues at CRISP, scientific consultancy with researchers based at other universities, cooperation with other designers and also with staff at the clinic where the project was based, and the participation of the principal users – a group of patients at the clinic. Working across this broad range of partners, Cámara Leret takes a design approach that she describes as speculative. For G-Motiv she describes a trajectory leading to provocative illustrations and prototypes that 'reveal new narratives and behaviours' around emerging technologies<sup>[5]</sup>. How does the approach of a speculative designer interact with the commitments of partner organisations? Moreover, where the designer is encouraged to consider their role as a form of research, how might features of their practice be constructively discussed?

## What is speculative design?

First some background about speculative designers undertaking interdisciplinary projects. Designers have for some time adopted strategies from artists and architects, and exhibited hypothetical objects and scenarios. These forms of public event are seen to provide occasions for discussion and debate about technology and society. Tony Dunne and Fiona Raby describe this approach:

Rather than writing papers and seeking conventional academic approval, [designers] could exploit their privileged position to explore a subversive role

for design as social critique... Design proposals could be used as a medium to stimulate discussion amongst the public, designers and industry.<sup>[6]</sup>

Here Dunne and Raby suggest that designers can initiate a critical discussion about the implications of emerging technologies. Workshops, exhibitions and publications provide an opportunity for public encounters with design and representations of design to bring about debate, where discussion flows out of or somehow impinges upon the experience. Some examples of exhibitions include Design and the Elastic Mind<sup>[1]</sup>, and NOWHERE/NOW/HERE<sup>[9]</sup>, Designing Critical Design<sup>[12]</sup>, WHAT IF...<sup>[7]</sup> and IMPACT!<sup>[8]</sup>.

In 2004, scientific institutions funded two speculative designers to lead public engagement of science and technology projects. *Hybrids* was funded by the Wellcome Trust (Ashcroft & Caccavale), *Biojewellery* by the Engineering and Physical Sciences Research Council (Thompson & Kerridge). In both *Hybrids* and *Biojewellery* there is a clear move from notions of debate rooted in an internal critique of design, to versions of public engagement that share the floor with science educators and funding councils. Here is a move away from a model of practice where the designer is an iconoclast, towards an interdisciplinary model where the designer is working with scientists, social scientists and researchers from other backgrounds.

What does the creative industry and innovation in the Netherlands have in common with the public engagement of science and technology in the UK? I suggest that in both cases, a speculative approach becomes extended through the support of a partner organisation. Here, disciplinary notions of design for debate become mixed with the requirements of a partnership programme, for example to perform service innovation or enable public engagement. These forms of interdisciplinarity are opportunities for more robust descriptions of designers' speculative impulse for debate about emerging technology.

### **Issues arising from collaboration where speculation and engagement mix**

I would like to offer some brief discussion around the mixing of a speculative approach to design with the commitments of partnership projects. Lacking personal experience with G-Motiv, I move to a case with which I am more familiar. *Material Beliefs* was a three-year project supporting collaborations between speculative designers and biomedical researchers for the public engagement of

science and technology<sup>[10]</sup>. The two snapshots below draw upon interviews with designers and researchers from one of four collaborations in *Material Beliefs*.

The first snapshot raises an issue about partner expectations around the designer's role. During an exit interview with the designer and researchers, there was much reflection on disciplinary differences, which were conceptualised as the 'looseness' of a design approach, and the 'specificity' of scientific approach. The perception of design's looseness was expressed by researchers in terms of the conceptual development of the outcome, particularly the open-ended nature of the interpretation of that design, and also its evaluation. These issues were somewhat compounded by a lack of clarity about the designer's approach, as one researcher commented:

That's something we could have benefited from. A sort of "well what is a designer supposed to do" up the front, at the start. If some sort criteria had been suggested, by which we can measure it by. So we know, "Oh OK. In the design world, that's good." Because the criteria for measuring things in the design world might be completely different to the science world. And I think we just didn't know what to expect.<sup>[5]</sup>

Ambiguity about the nature of the designer's approach and role, play out in two ways. Firstly, the researchers see design as enabling the positive public promotion of the research by bringing additional features outside of their competencies, and ascribing what is described as a 'wow factor' to their research. Secondly, from the perspective of the designer, his role becomes restricted by expectations that design 'packages' the research in order to provide publicity. This is seen to compromise a speculative approach so that the outcomes "becomes a decoration of science" and where the designer "could have become [the researchers'] PR"<sup>[5]</sup>.

A second key issue emerged around the extent to which a speculative design should incorporate the technologies being developed by biomedical researchers. One designer was permitted and indeed encouraged to make a prototype that would be functional, rather than hypothetical. The designer commented on this issue:

My practice in the past few years been very much about collaborating with people and looking at the way you use design in order to discuss specific social cultural issues around scientific research and about producing often quite highly provocative projects... One of the things that made me really

question what I was doing, or what I've done, was [the researchers'] willingness to let me actually be involved with [their] research. And also hands-on, to actually implement [the researchers'] scientific research in a way that could be used. That was extremely exciting for me, but I think it also provoked conflict. Coming from a perspective that's only engaged at an intellectual level, as with thought experiments, the moment that you have a hands-on approach then you have to justify why you're doing that, and that was a massive learning curve for me.<sup>[5]</sup>

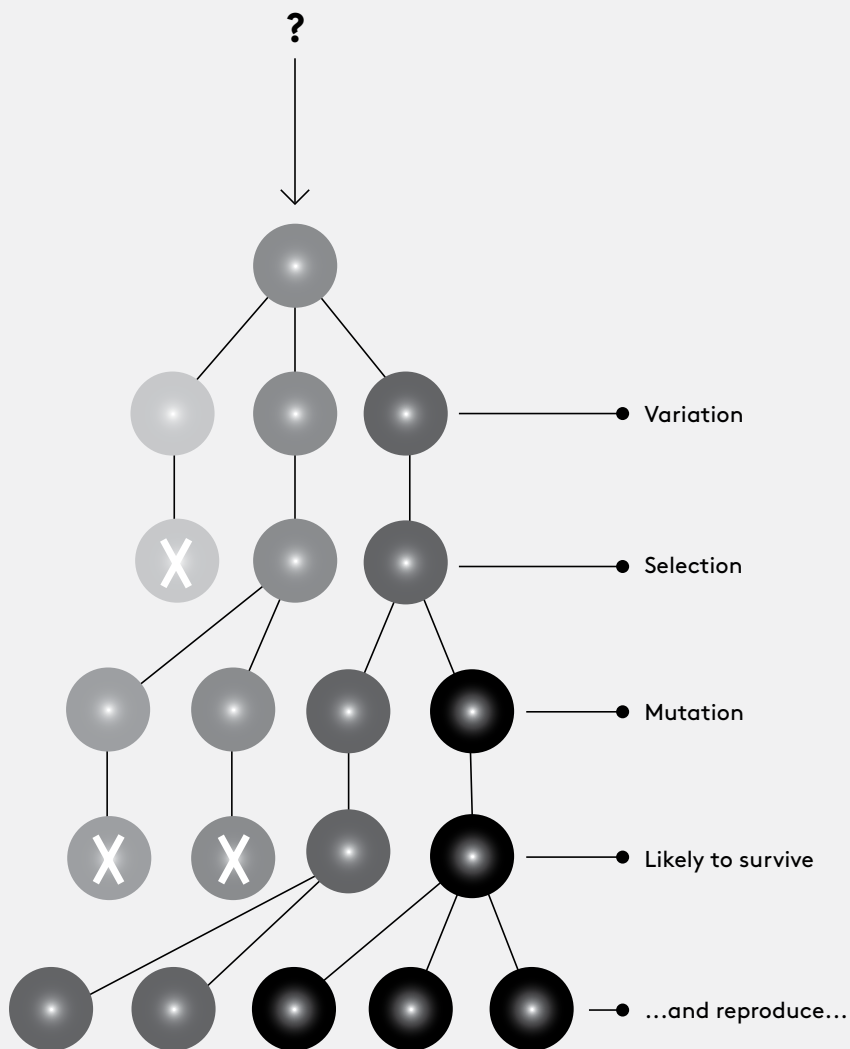
In this case, the researchers are working with animal cells, and so there were ethical and legal implications regarding the ways that their work was presented and embodied in a collaborative design. In order to deliver a prototype for *Material Beliefs* the designer decided he had two options: to disengage from the collaborative opportunity and make a thought experiment, or to deliver a functional prototype that would not be controversial.

## Conclusion

In this short essay I discussed features of a speculative approach to design in interdisciplinary settings. I started with some background to speculative design, and a provocation that this approach is being challenged and extended by partnership programmes. Then, not possessing any personal insights into the G-Motiv project, I moved from Cámara Leret's reflections on her role there, to another project where speculative designers worked in interdisciplinary groups. I offered two empirical snapshots from *Material Beliefs* in order to raise issues arising from collaboration. Firstly biomedical researchers were confused by speculative design, and hoped that the designer would act to promote their research to the public. Secondly, the hypothetical nature of the designer's approach was problematised by the opportunity to functionally integrate biotechnology in the prototype, thereby putting pressure on ambitions for controversy. Such issues, arising from action on the ground, format a design as it comes together, which may or may not be familiar to speculative designers working in programmes with various organisations. However, I contend that an empirical discussion of this kind is valuable when designers wish to provide accounts of their practice as a form of research. For while speculative designers will continue to have exhibitions, and have their designs curated and published in catalogues, it is through attention to the detail of what is enabled during collaboration, and the issues that arise there, that constitute a productive reflection of practice.

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## Speculative Design & Radical Innovation

- MUTATION AND SELECTION -

# The contribution of ‘Kindred Spirits’ to CRISP

Bas Raijmakers

The Creative Industry Scientific Programme (CRISP) has as its goal to understand better what strategic roles designers can play in society and the economy. Companies in the creative industries can benefit from this because strategic designers have the right skills base to play a bigger part in creating solutions for complex problems, rather than just executing solutions that others – business consultants and policy makers for instance – have already defined. Also, the organisations that commission strategic designers can benefit from gaining this understanding because a more creative economy will be more competitive, and a creative society will be more resilient. The work of Susana Cámara Leret contributes to understanding and creating strategic roles for designers in several ways:

## **Designers have a strategic role to play in solving complex problems**

Cámara Leret worked with youth patients and staff at Brijder, a Dutch rehabilitation centre for over a year. In such an environment in the Netherlands, designers often are restricted to designing the interiors and the communication materials such as leaflets and posters. But Cámara Leret looked at the treatment itself and at how patients and staff engaged with each other from the initial contact onwards. In addition, she looked at the overall experience of the residents actually living in the treatment centre. She developed trusted relationships with the people who matter in that environment. Both analytical and empathetic skills were crucial to this end. This offered a solid basis for a more fundamental involvement as a designer, in finding solutions to the complexities of rehabilitation for young people, along two different lines.

Her first intervention was welcomed as an addition to existing treatment, using an entirely new medium for staff and patients: smell. This is a material not much used in design, but very usable when approached with rigorous design skills related to the exploration of materials, their capabilities and limits. Such deep explorations by designers typically have concrete results. Cámara Leret created the *Smell-Memory Kit: The Molecules that Matter*, to be used during intake interviews

at the clinic, which centre around memories and storytelling. The smell-based kit made the memories and stories flow considerably easier at a normally stressful time for young addicts entering the clinic. We can call this a strategic intervention because the treatment itself is influenced by it.

Susana Cámara Leret's second line of investigation is speculative but as explorative as the first. With *Kindred Spirits*, she aims her design research at speculative futures rather than material ones. The design fictions that resulted are no less strategic, because they allow staff and patients to look and talk *beyond the everyday*. As Ré Dubhthaigh notes [p. 35] in this publication, being able to address both the immediate needs of the clinic, staff and patients, and to develop speculative designs for the future in one project presents great advantages because it enlarges the strategic effects of the separate design efforts. The intervention in the present is no longer a one-off because it can be seen as a first step towards other possible futures. And the speculative designs are rooted in the present, instead of disconnected from the 'now', which makes them more relevant to discuss.

#### **Organisations must learn about the strategic role design can play**

The rehabilitation of young addicts (aged 15 to 25) is a complex problem that is generally not immediately understood as a design problem. The partners from the care sector have now seen what role design can play. This role gave them new perspectives on their work, as well as new suggestions for how they can do their work, using smell. The *Smell-Memory Kit* is designed to such a level that the kit is ready for immediate use with success. Currently these kits are in use at the clinic, and they are robust enough to be used again and again, without further support from designers. This sort of outcome is typical for designers: understanding gained in design research is immediately turned into action. For many organisations it is new to engage designers for both gaining the understanding (the research), and creating the intervention (the design). More common is to investigate what information needs to be conveyed to patients, for instance, and then to hire a copywriter and designer to create a leaflet brochure or build a website. With designers in a strategic role, all these activities can happen simultaneously where all involved collaborate organically, with much more openness as to what form the result eventually will take.

The concrete result of the *Smell-Memory Kit* kit opened the doors to engaging with the speculative results, looking much further ahead to futures previously not

imagined. This started conversations that previously were not considered possible – about the impact of the physical space on the wellbeing of patients and staff, for instance. Involving designers to start up such conversations, without a brief that defines what concrete results they should lead to, is again uncommon. Designers may be invited to deliver ‘creative ideas’ at times, but without being grounded in a deep understanding of the place and its people, such creativity is somewhat frivolous. Creativity that is firmly rooted in the present – yet dares to look far into the future, as Cámara Leret’s *Kindred Spirits* do – is easy to understand as strategically important. Examples like the *Kindred Spirits* are important because they will allow designers to justify their presence in strategic conversations – before design briefs are written.

# Contributor biographies

## Daniëlle Arets

Associate Reader (Associate Lector) in the Readership (Lectoraat) in Strategic Creativity, Daniëlle Arets also possesses a key role in communicating the knowledge that results from CRISP to creative industries and education as a Knowledge Transfer Officer for CRISP. Arets has a strong record in organising debates for a wide array of public, educational and commercial institutes, and through this experience she has become a strong advocate for interdisciplinary research and design. As Associate Lector and Knowledge Transfer Officer, Daniëlle aims to bridge academic and design thinking through strategic, creative tools and techniques, and of course, many debates.

## Ré Dubhthaigh

Ré Dubhthaigh is a founder and principal of The Civic Works, Ireland, where he leads on service strategy work with public sector organisations including Dublin City Council, the Department of Health and the Crafts Council of Ireland. He has a background in design research and strategy. As director of service design agency, Radarstation, he has led projects for clients including BBC, Sony, Lego, Southern Water, and Hitachi. Dubhthaigh is a Design Associate at the UK Design Council, working with start-ups and industry and public sector organisations in the UK to innovate their services. Dubhthaigh has an MA in Interaction Design from the Royal College of Art, London, and has been a researcher at Innovation RCA and the Interaction Design Institute, Ivrea. He is a regular lecturer and speaker on design and service strategy internationally, and was an advisory panel member for Pivot, Dublin's World Design Capital bid in 2010.

## Berend Hofman

Berend Hofman is a *GZ-psycholoog* (healthcare psychologist) working as chief clinician at Mistral, a clinic for substance abusing youth. In 2003 he received his MSc title from Leiden University, specialising in developmental psychology, after completing his internationally published study on language acquisition. After a five-year stint working in youth psychiatry at De Jutters he commenced his

postdoctoral study in healthcare psychology at Erasmus University in Rotterdam, finishing only two years later in 2009. In the same year he started working for Brijder Jeugd where in 2012 he was awarded a scholarship to start his research on the usability of two often-used self-report screeners with substance abusing adolescents.

### **Susana Cámara Leret**

Susana Cámara Leret's work concerns a transdisciplinary and experimental practice, creating stories that explore things possible. The descendants of her narratives oscillate at the intersections between art, design, science, fiction and reality, confronting scientific truth with the anecdotal or absurd. Her interests lie in cross-species collaborations in an on-going search for alternate ways of living. These explorations materialise through multidisciplinary collaborations with experts from the life sciences to the computer sciences, alongside institutes such as the Netherlands' Metabolomics Centre or The Waag Society: Institute for Art Science and Technology (NL). Susana holds a MA in Conceptual Design in Context (IM) from Design Academy Eindhoven and a BA in Fine Arts from the University Complutense of Madrid. Recently having completed her Research Associateship within the Creative Industry Scientific Programme at Design Academy Eindhoven, she currently lives and works in Amsterdam, The Netherlands.

### **Catelijne van Middelkoop**

Catelijne van Middelkoop is founder and partner of Strange Attractors Design (2001), an international studio located in Rotterdam and New York. Strange Attractors uses new and traditional media to create design solutions for contemporary problems and desires. In addition to running a design practice, Catelijne is coordinator and teacher in the Man and Communication department, as well as tutor in the renewed 'Lab' and Propaedeutic (First) Year of Design Academy Eindhoven. She was involved as a tutor in the Open Design Space *A Message for Oblivion* related to *Kindred Spirits*. Van Middelkoop has an MFA in 2D Design from Cranbrook Academy of Art, a Degree in Graphic & Typographic Design from KABK, studied Art History and Archeology at the University of Amsterdam, is an external specialist at the Research Department of Art Theory and Artist Practice at KABK, and was on the national board of directors of the BNO (Association of Dutch Designers) from 2006 to 2012.

*[www.strangeattractors.com](http://www.strangeattractors.com)*

## **Bas Raijmakers**

Dr. Bas Raijmakers PhD (RCA) is Reader (Lector) in Strategic Creativity at Design Academy Eindhoven and leads the in-house CRISP research team. Bas Raijmakers has a background in cultural studies, the internet industry, and interaction design. His main passion is to bring the people for whom we design into design and innovation processes, using visual storytelling. He holds a PhD in Design Interactions from the Royal College of Art, in London. He is also co-founder and Creative Director of STBY in London and Amsterdam: a design research consultancy specialised in service innovation. Bas Raijmakers works for clients in the public sector and industry, around the globe.

## **Sissel Tolaas**

Sissel Tolaas has dedicated herself to Nose / Smell at all levels of life, for more than twenty years. She has an archive of 6730 smells sourced from reality, plus a lab archive of 2,500 molecules. Her work has been exhibited at SFMO-MA, San Francisco; MOMA, New York; the Guggenheim, Venice and Berlin; Museum of Modern Art, Berlin; National Art Museum of China, Beijing; bien-nales in Berlin, Venice, Tirana, Gwangju and Liverpool. Recent awards include the Rouse Foundation Award 2009, Harvard Graduate School of Design and an ArsElectronica Award 2010.

## **Valentijn Visch**

Valentijn Visch works as assistant professor at the faculty of Industrial Design at the Delft University of Technology. He conducts and coordinates persuasive game design research, and is project leader of the Economic Affairs funded CRISP G-Motiv project (2011-2015) and the NWO granted NextLevel project (2013-2017). Both research projects contain research as well as industry- and userorganizational- partners. Valentijn has a background in Literature (MA), Art theory (MA – postgraduate Jan van Eijck Academy), Animation (postgraduate NIAF Tilburg), Cultural Sciences and film studies (PhD – VU), and experimental emotion research.

# Glossary

## **Creative Industry Scientific Programme**

The Readership in Strategic Creativity is embedded in CRISP (Creative Industry Scientific Programme). CRISP is a Dutch national research programme of more than 60 organisations, in which Design Academy Eindhoven collaborates with the Technical Universities of Delft, Eindhoven and Twente, VU and UvA in Amsterdam and over fifty design companies and service providers in The Netherlands. CRISP is supported by the Dutch Ministry of Education, Culture and Science. For details about all CRISP projects, see: [www.crispplatform.nl](http://www.crispplatform.nl).

## **G-Motiv**

G-Motiv (2011-2015) is a multidisciplinary research project funded by the ministry of Economic Affairs as part of the CRISP program. The G-Motiv team performs research on persuasive game design, more specifically on the effect and design of game-elements to achieve physical, social and mental behavioural change. The project results in knowledge of the behavioural effect of game-elements, knowledge of the design of game elements and a set of validated prototypes. In order to achieve these results the G-Motiv team comprises research partners (Industrial Design TU Delft, University of Amsterdam, Vrije Universiteit, TU/e, Design Academy Eindhoven, Novay), game design agencies (Monobanda, IJsfontein, RANJ) and end-user related organisations (Parnassia Bavo / Brijder mental healthcare, Careyn elderly care, Berenschot consultancy). The project is led by Valentijn Visch at Technical University Delft.

## **Open Design Spaces**

Open Design Spaces are an initiative of the Readership in Strategic Creativity at Design Academy Eindhoven. The team of Research Associates of the Readership works on collaborative projects within CRISP. The Open Design Spaces extend this collaboration to students and tutors at the academy to introduce what academic design research entails. These series of workshops are a way for students to participate in this research programme. They are a bridge between the Readership in Strategic Creativity and the educational programme of Design Academy Eindhoven.

## **The Readership in Strategic Creativity at Design Academy Eindhoven**

The Readership explores how design and creativity can play a strategic role in society and the economy in general, and in service innovation in particular. Academic knowledge is created through designing, within the strong design culture of Design Academy Eindhoven. The results of the programme are used within the educational programme of Design Academy Eindhoven by way of Open Design Spaces: a four-week design research module for students around a topic related to the research of a Research Associate. Further results are disseminated through public debates, conferences, workshops and publications. You can follow the work via several digital channels.

See more details at [www.designacademy.nl/strategiccreativity](http://www.designacademy.nl/strategiccreativity).



# Colophon

## Kindred Spirits

The Readership in Strategic Creativity at Design Academy Eindhoven

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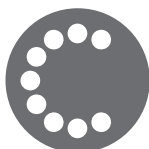
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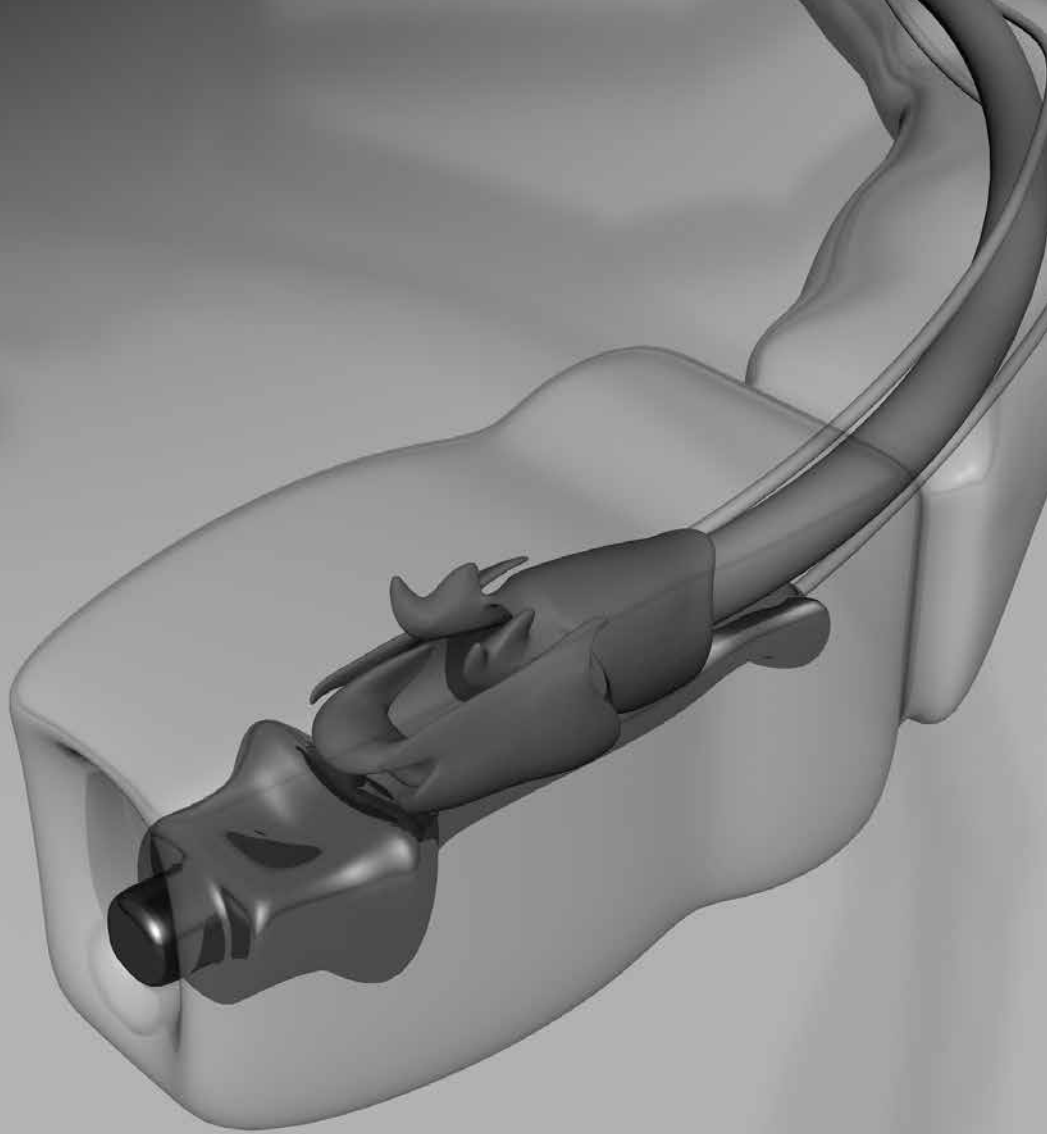
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Designing with young addicts and healthcare professionals in a rehabilitation clinic requires a deep understanding of the everyday situations they face, especially when the anticipated designs aim beyond the mundane at more speculative and uncharted territories. This publication brings together a wide range of perspectives of that journey, with stories about how the design of a set of smells influenced the youths' treatment and how the design of fictional 'companion species' allow people at the clinic to see and discuss their daily environment in new ways.



The *Kindred Spirits* is a project by Susana Cámara Leret, Research Associate at Design Academy Eindhoven, and part of the G-motiv project within CRISP (Creative Industry Scientific Programme). CRISP focusses on exploring strategic roles for designers in society and the economy, because creative societies are more resilient and creative economies more competitive. A strategic intervention anchored in the 'now', strategic design is rooted in a deep understanding of the situations it discusses; its aim is to open the door – for all of us – to future uncertainties.

This book is part of a series of publications of the Readership in Strategic Creativity at Design Academy Eindhoven. The Readership explores how designers trained at Design Academy Eindhoven can create academic knowledge through design.



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