# A e s t h e t i c DIALOGUES

A conversation between hands and industry

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Fig.1, 'Waterleather', illustration by Amba Molly, 2011

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"I believe the hands of the maker creates the soul of an object."

Working in the field of arts, crafts and design for the last 8 years, my interest in functional objects created by hand which tell a story has evolved. I believe that the hand of the craftsperson and industrial methods, when merged together can create interesting beautiful objects. As a maker/designer I appreciate the aesthetics of both the craft world and the industrial world. I envision that in the future, industrial produced products will include parts made by a craftsman's hand and vice versa. This interest in combining two worlds arises from my multicultural background. With my father being from Surinam and my mother from Holland, I pose the question if it would be possible to craft a breed of multicultural objects that show the best of both worlds.

Over the past three years during trips to Ghana and Morocco, I have observed alternative methods of hand making which have fascinated and inspired me. In these countries the makers utilize alternative forms, materials and technical solutions from their environment to create functional objects employed through out their daily lives. This aspect of hand made functional objects for survival resonates with me.

On the other hand the world of the industrial mass-produced objects appeals to me too. I appreciate the precise simple aesthetics and subtle details created by the machines that manufacture them. During my research I discovered that there are many differences between both the craft world and the world of industrial production, the most notable being the removal of the human touch and the body and mind connection to the work. With the rapid growth of technology, industrial objects are designed and pumped out at a fraction of the time similar objects would take a craftsperson to make, and of course, at a fraction of the cost too. Not to take into account the years the crafts person spends studying in order to acquire the skills necessary to make the object in question. Sadly people are slowly losing contact with the processes of making objects by hand. Refrencing the work of designers Christien Meindertsma and Atelier NL, I will investigate this disconnection between peoples growing unwareness of the sources of materials and the way objects are made.

I strongly believe that we should approach the future of making, by sharing the tried and tested skills and knowledge of craft with industry and start using new combinations. Kathryn Hinton and Lenneke Langenhuisen are two examples of artists that wrestle with and visualized this correlation between crafts and industrial production in their work. In my opinion this cross-pollination of disciplines will broaden the field of corpus. It is where new ideas, solutions and processes can be found. In short, by taking the goodness from each discipline and mixing it up, we can create "new" Corpus with "multicultural" 'DNA'.

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I am a craftsperson fascinated by handmade objects. In my believes the hands of the maker create the soul of an object. The craftsperson leaves their imprint within the work adding character and at the same time revealing the makers story and possible clues to his or her process. Working with natural materials, cutting, shaping, sanding, drilling, raising etc.. This making is a necessity for survival. A net to catch fish, a bowl to eat and drink from and a vessel to keep milk. These crafts people are an essential part of the community and their craft making and skills are a part of their everyday life, a daily duty. The rhythm of life is part of there process; there is no separation between life, work and object. They have peace in their minds and rest in their hands and will work until they are satisfied. In comparison with the world of mass-produced, machine made objects, we are slowly loosing our connection to and feeling of the raw materials, craft traditions and our general view on objects and where they come from.

In my eyes we should approach the industry with the tried and tested skills and knowledge of craft, respectful of their traditions and start using them in new combinations. In this way I see that merging craft with the methods of mass production can result in a new vocabulary within the world of arts, crafts and design.

Whitin this essay I will discuss the world of craft and the hand made. In the chapter '**TALKING THROUGH HANDS'**. I reflect upon myself as a maker and question what it means to make an object by hand and how the maker is involved in this.

Glenn Adamson's book '*The Craftsman*' and the catalogue of the exhibition '*Power of making*' held in London last year, were both very helpful books in order to approach and develop this chapter.

In the chapter 'LISTENING WITH INDUSTRY', I will discuss the world of Industrial production and mass-produced objects. I will Briefly discuss the ideas of William Morris and Karl Marx on the shift from crafts to industry. In the chapter 'GOATSKINS, LEMON TREE SPOONS AND PLASTIC BOTTLES' I talk about my travelling in both Morocco and Ghana and the materials used in crafts and the industrial production. I will re-think the hand made and will look at examples within the field of corpus and design to see how the dialogue with the idea of merging the world of craft and industry has already started. In the chapter 'COMING TOGETHER' I will outline my conclusion as well as my position on the cross-pollination of different disciplines and talk about my vision of the future within corpus.

"I believe that we should approach the future of making with sharing the tried and tested skills and knowledge of craft with industry and start using new c o m b i n a t i o n s " 'The hand is a philosopher'. (Paul Valery)

According to Richard Sennet two centuries ago Immanuel Kant remarked;

The hand is the window on to the mind." Of all the human limbs, the hand makes the most varied movements, movements that can be controlled at will. Science has sought to show how these motions, plus the hand's varied ways of gripping and the sense of touch, affect how we think.1

I too share Kant's belief according which, when making an object by hand, the hands seamlessly collaborate with the brain, it becomes an act on itself. Research shows that as mankind has developed so have our hands. For example today with the arrival of smart phones, thumbs, previously very much employed when using regular cell phones, have now retired: all one needs now is one finger Martine Margetts writes about the hand/mind connection and the deeper message in handmade objects. She states;

The ideas of the mind are formed in the knowledge of the body, but just as the body contains and hides the mind and the emotions, so does the object shield its inner core. The role of making is therefore to give life to things, but also to show evidence of live within us, perhaps also at a spiritual level.2

In the past three years through my trips to Ghana and Morocco, I have observed alternative methods of hand making which have fascinated and inspired me. In these countries the makers utilise alternative forms, materials and technical solutions derived from their environment, in order to create functional objects employed through out their daily lives. For example: a tin can rebuilt as a lamp, hammers made from wood combined with textile Fig.3 and the process of wooden vessels turned on a primative lathe powered by hand and cutting tools held by foot Fig.4. These objects all bear an imprint of the hands that made them. This aspect of the hand made functional objects for survival resonates with me. Anthropologist Daniel Miller echoes my stance as he describes the non-industrial farmers and potters he has lived with for several years;

"These people where engaged in making a given rage of objects over a lifetime, simply to feed their family. The modern ideals of creativity and fulfilment are simply not relevant in most cases".3



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Making is an essential part of our world on numerous levels: from our first childhood drawings, which where masterpieces, to our master exam work. Everyday, from the moment we awake, we are making or doing something; breakfast, the dishes, dinner, love etc...But what does it mean to make an object by hand and how is the maker involved in this process? When we use the term of making in the field of art and design we often talk about crafts. Crafts can be seen and described differently. According to

#### Glenn Adamson;

"Craft is a habitual skilled practice with particular tools; materials or media for the purpose of making increasingly well executed artifacts. Crafts is the application of personal knowledge to the giving form."4

While Martina Margetts says that craft is based on;

"A sequence of repetitious acts, incrementally forming objects with meaning. -'Imitation as a learned bodily habit that became a cognitive practice and finally led to knowledge and the production of effects." 5

I consider crafts to be a dialogue between the head and hands resulting in objects. All over the world, there are numerous types of crafts being practiced and leading to various results and intentions. Some have functional purposes that are crucial for survival; others are aimed at selling in order to make a living. One trait they all share is that they all involve crafts people working with their hands and practising a certain craft. Adamson adds:

The good craftsman, more over, uses solutions to uncover new territory; problem solving and problem finding are intimately related in his or her mind. What all crafts share is not just technique, or hard work on form, but also a probing of their medium's capacity, a passion for practice, and moral values as an activity independent of what is produced.6

# Reflecting on myself as a maker...

As a craftsperson when making through my hands the work is constantly in close connection to my body. My hands together with tools enable me to explore a new world. My relationship to my tools and making is inseparable and important. Craftsmen and craftswomen need specific tools helping them in executing their craft timely and precisely. Martine Margetts describes this relationship;

> "Tools and equipment are prosthetic extensions of the body that carry the thought of the maker, wholly different from the autonomous production of machines."7

When immersed in the act of making, all my senses are engaged: I experience the scent, the feel or texture and the sound of the material I am working with. At the same time my mind is fully occupied contemplating the next step in the craft process. This engagement of my body and mind in my craft making is a leading factor in my process. This way of working becomes almost a form of meditation. I will not stop until I feel my work has reached my idea of perfection. Jean Piaget in his book III of Emile acknowledged the importance of linking the hand to the head. He states:

> "Instead of making a child stick to his book, I employ him in a workshop, his hands work to the advantage of his intellect, he becomes a philosopher while he thinks he is simply becoming an artisan."8

When working with our hands, we stimulate our brains. The hand's sensitivity develops overtime and takes the mind beyond its plan, We work until it feels like we are: talking with our hands through making. I believe that this craft language resulting from the head and hand seamless interaction, is important and can help us develop new solutions in our daily life objects over time. Martina Margetts supports this Idea she writes;

The plan of design alters in the doing or, conversely, the beginning of making with the hands enables a plan to evolve...Embodied in making is the operation of time and memory, with which mind's eye, hand and tool drawn on a profound well of tacit knowledge to originate form, sometimes in slow and patient incremental steps, sometimes in an second intuitive decision to remover to iron from the fire. 9

Working with the hands puts the craftsperson in a vulnerable and intimate position. It is a process of trial and error. Should the craftsperson make a mistake within the process he or she has to repair or remake the object. Mistakes are embraced, as they are part of the process. This responsibility is part of the job. David Pye calls this "Workmanship of risk". He explains;

At any moment within the process one can by accident, inexperience or just not paying enough attention to the object, ruin the job. This stands against the craftsman as a worker of certainty. One has total control of the final outcome. These are strong concepts that talk about the confusion with craftsmanship, quantity-production, hand-made, and skill.10

Martine Margetts cites sixteen century Potter Bernard Pallisy on the topic of "

Workmanship of risk" she writes:

Even if I have a thousand reams of paper to write down the accidents that have happened to me in learning this art, you must be assured that, however good a brain you may have, you will still make a thousand mistakes, which cannot be learned from writings." 11



Fig. 4 'Foot-turning', image by Amba Molly, Marakech, Morocco, 2012



Fig 5. 'PET-bottle', www.exportersindia.com/uniquepet/products.htm?slno=126331,2011

In manufacture, the revolution in the mode of production begins with the labour – power, in modern industry it begins with the instruments of labour. Our first inquiry then is, how the instruments of labour are converted from tools into machines, or what is the difference between a machine and the implements of a handicraft? 12

This difference between a machine and the implements of a handicraft, is an aspect that I'm also interested in. Mass-produced, machine-made objects surround us in our day-to-day lives, in particular disposable products that we utilize for eating and drinking. Bottles, cans, plates, forks, knives, spoons and cups the list is endless. They are not expensive so we tend to percieve them as not having any real value. Yet there function of perserving and containing for food and liquids is important. What interests me about these mass-produced objects in particular plastic containers, is the precise, simple aesthetics and subtle details created by the machines that manufacture them. For example, a straight line in a plastic bottle is really straight and consistent, some of the details in these objects are equally or more beautiful as the handcrafted details. According to Charles Babbage:

Nothing is more remarkable, and yet less unexpected, than the perfect identity of things manufactured by the same tool. If the top of a circular box is to be made to fit over the lower part, it may be done in the lathe by gradually advancing the tool of the sliding-rest; the proper degree of tightness between the box and its lid being found by trial. After this adjustment, if a thousand boxes are made, no additional care is required; the tool is always carried up to the stop, and each box will be equally adapted to every lid and they have a similarity which no labour could produce by hand. 13

There are many differences between the craft world and the world of industrial production, the most notable being the removal of the human touch and the body and mind connection to the work. Within the craft world, the craftsperson engage, body and mind with the object: from beginning to end they have full control. In the world of industry the worker is not engaged with the object being produced. The job of the worker, usually entails operating one machine or one task and when this is completed, he or she passes the object on to another worker to perform another step within the production.

A good example of the dull factory work in its extreme, is provided by the series of photographs 'Manufacturing' by Edward Burtynsky. Fig 6. In my opinion, the production line type of work leads to poor moral and lack of interest in the objects being produced. Research shows that William Morris and his Arts and Crafts movement (1860-1910) echoed this idea. Morris was deeply influenced by medieval times, when there was no separation between worker and craftsperson and he believed the true nature of the worker was being violated by the factory system. Later Karl Marx talks about this process;

In the manufacture of envelopes, one man folded the paper with the folder, another laid on the gum, a third turned the flap over, on which the device is impressed, a fourth embossed the device, and so on; and for each of these operations the envelope had to change hands... ..."In handicrafts and manufacture, the workman makes use of a tool, in the factory, the machine makes use of him." In many manual implements the distinction between man as mere motive power, and man as the workman or operator properly so called, is brought into striking contrast. For instance, the foot is merely the prime mover of the spinning- wheel, while the hand, working with the spindle, and drawing and twisting, performs the real operation of spinning. It is the last part of the handicraftsman's implement that is first seized upon by the industrial revolution, leaving workman, in addition to his new labor of watching machines with his eyes and correcting its mistakes with his hands, the merely mechanical part of being the moving power.14

Objects created by machines have not only different aesthetics but they have a different story and feel. I believe that ,by merging some of these industrial processes with the hand and knowledge of the craftsperson, the language of making with the hands grows wider. The Italian shoemaker Salvatore Ferragamo struggled with this duality and tried to make his handmade shoes in a larger manufactured production he tells:

"If I could maintain my output only by using the methods of mass production, and if the only way I could maintain my standards and my reputation was by the manufacture of hand-made-shoes, why not a system of making hand-made shoes by mass production?"15



Fig 6. Edward Burtynsky, Manufacturing #10A and 10B, Cankun Factory, Xiamen City, 2005



Being a craftsperson, I enjoy working with natural materials such as wood, leather, glass and clay. These materials are pre-loaded with stories and have been used worldwide throughout history and are still used today to create functional and nonfunctional objects. I see them as, pure honest, unspoilt materials. They are timeless and their pale identity and scars appeal to me.

While traveling in Morocco and Ghana, I came across different materials used in objects. I observed that the objects being crafted were made with materials that where soft enough to be worked by the hands, resulting in durable functional objects. Nomads in the Atlas Mountains in Morocco made their water bottles from the skins of their goats, which is a clever but also ironic fact, as they are preserving their food with the skins of their food (life looks after life); these are survival water bottles. Fig 8. I also saw spoons carved out of the lemon tree, cooking pots made from clay and hay in the mountains and the potterie in Tarroudant, where it is custom to mix Cumin with iron rust to give their ceramics a beautiful yellow color.

### Plastics

Within the world of industrial production numerous types of materials can be found; plastics, rubbers, silicones and foams to mention just a few. They all have different processes to create objects on a big scale production. For this essay I have narrowed my research down to plastics. Plastics are materials we see everywhere on a daily basis; we understand plastics as a material that embraces a range of forms, functions, colors and textures. According to Penny Sparke;

Plastic products after the Second World War became associated with the concepts of 'inauthencity', 'Cheapness', 'low quality' and 'bad taste' In contrast to the traditional 'craft' materials like clay, porcelain, copper, gold, and different types of wood they were downgraded and seen as cheap materials. The cultural meanings that plastics have are integrated in the pastcentury. First they where created for luxury materials which were upcoming. First celluloid and later the synthetic plastics were developed as cheaper, more available alternatives.16



This throwaway, cheap quality we project on to plastic objects leads me to believe that plastics are soulless, that they have no emotional value but rather are merely functional objects. This in turn has had an effect on our material culture and society. If we are surrounded by plastic which most people view as disposable rubbish, this can only add to our feeling of alienation. Daniel Miller, using a 3D printer as an example, talks about this alienation:

A 3D printer is the devil's gift, taking us still further from a glimpse of heaven. Such ideas seem designed to make us feel shallow and inauthentic by comparison with our ancestors, and probably increase rather than decrease our feelings of alienation. 17

## Re-thinking the hand made

With the rapid growth of industry and technology, objects are designed and pumped out in a fraction of the time similar objects would take a craftsperson to make, and of course, at a fraction of the cost too. Not to take into account the years the crafts person spends studying in order to acquire the skills necessary to make the object in question. Sadly, people are slowly losing contact with the processes of making objects by hand, Many younger people don't see the point in spending years on low pay for mastering a craft, when a similar looking object can be bought in the two euro store, Daniel Miller describes this tension between the craftsman and industry:

We have become extraordinarily distant from the sources of our own material culture. The more things we posses and consume, the more the origins of those things are taken for granted. Why is not part of our most basic education, at primary school, to learn the fundamentals of how most things are made and from what?<sub>18</sub>

Some people don't even know how and where objects are made. Daniel Charny states;

Yet despite all the value that exist in making, fewer and fewer people know how to make the things they use, need or want; or even how these things are made. This is one of the unfortunate legacies of the industrial Revolution that we live in. The distance between the maker and the user is growing and, with it, knowledge, understanding and appreciation are diminishing. Distance in and lack of understanding are impacting also on governments and educational institutions, which are failing to see that making is very much part of the futurethat the power of making lies far beyond providing technical support to those who manage. Nor is making the exclusive domain of the creativearts. Applied thinking lies at the core of creating new knowledge of all kinds, and the sensibilities of making should increasingly be made a part of our future. If it is not, it will lead to a great loss in value. Arts should not be separated from science, technology, engineering and mathematics. <sup>19</sup>

A good example of showing the origin of a lot of our products is provided by a research project developed by Dutch designer Christien Meindertsma. She has spent three years researching all the products taht are made from a single pig. Amongst some of the more unexpected results were: ammunition, medicine, photo paper, heart valves, brakes, chewing gum, porcelain, cosmetics, cigarettes, conditioner and even bio diesel. Fig. 9



I believe that the value of an object has a lot to do with the time it takes to produce it, the techniques and material's used, and the overall emotional impact. If I witness the craftsperson making the object, this increases my connection and value to the object. AEsir founder Thomas Møller Jensen adds;

"If you understand that it took skills and someone's time to manufacture a product, you won't throw it away as quickly as you would a mass-produced and impersonal objects."20

It seems like objects increase in value if one receives them from a loved one, or purchased them at a specific place or for a special occasion, or if he or she randomly bumps into them on a Sunday afternoon at a flea market. Caroline Slotte beautifully describes this link between memories and objects. She writes;

Objects from our private sphere evoke feelings and connect us to our past. They are tangible reminders of what has been; the history of ourselves, our family or relatives, our private or cultural, historical background. Many of these associations are unique and personal, of course, but some can be said to be if not universal then at least shared by individuals from the same cultural sphere. In this way, even the most commonplace object can hold the key to an inner world. 21

The history of the maker also has an influence on the value of the objects. For example, when a father passes down to his son or daughter his knowledge and craft secrets, which had been previously passed down to him by his own father, he is continuing to build a reservoir of knowledge, and for me this equals to building value. An example of this knowledge within materials is provided by the work

'Polderceramics'<sub>Fig.10</sub> by Atelier NL's Nadine Sterk and Lonny van Rijswijck, consisting of dug up clay for tableware from the polder in the Netherlands.



The series embodies local distinctions, as each piece was made from a specific plod of soil taken from each of the different farms they accessed across the 460 square kilometers polder. "We wanted to make tableware so that the vegetables prepared for dinner could be served from vessels made from the same soil the vegetables came out of", explains Van Rijswijck.22 Each vessel provided with a geo-code reference, matches the plot from where the soil came. The overriding principal behind the series was to keep the symbiosis between object and origin as pure and integral as possible. 23 This tableware appeals to me, because of the strong story connected to the material. By contrast the plastic water bottle in the supermarket, lacks story and material history. There are one hundred identical plastic bottles on the shelves. I am buying the bottle solely for the water and it's functionality as vessel. I have no emotional connection to the bottle. In the field of Jewelry and Corpus we work with raw materials that have monetary value already. A gold ring is more precious than a plastic ring. Why? Because gold is valued on the stock market and plastic is seen as a disposable material. One jewelry artistworking with the 'value' theme, is Christoph Zellweger. He gives descriptive diagrams Fig.11 alongside his objects and artifacts:

In such a graphic we see, for example, an exact correlation between 'value', 'appreciation' and physical density of substances, of materials, like wood or metal, which differ in weight and thereby also differ in their degree of preciousness and worth. As a result, questions arise: in terms of its value and its significance, what actually is the counterpart to a piece of jewelry made out of gold or stainless steel? The answer: a piece of jewelry made out of polystyrene. What do those adorning themselves with precious metal jewelry betray us? What do those wearing a 'commodity chain' out of polystyrene tell us about their value system? <sup>24</sup>



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# Artists examples

After researching the world of craft and the world of the Industrial production, I have discovered that there are obvious differences, the main one being that the craft world is not profit driven as the industrial world is. But I also came across many similarities. Both worlds strive for a certain type of perfection. Both worlds make objects with related production methods such as;

#### Blowing

To use the craft of glass blowing as an example: glass is hand blown by a crafts person to make a bottle. In the industrial world plastic bottles are made by a process called blow molding.

#### Form making

In the craft world when we form leather we pour hot water over the leather then form it over a mould. Not dissimilarly in the process of manufacturing plastic bottles, plastic is vacuum formed over a mould with a vacuum machine.

By observing and tweaking craft and industrial processes we can discover new solutions. Kathryn Hinton is a artist that shares my concerns. She makes digital jewelry using traditional silversmith and jewelry practices, She created a unique digital interface that captures the information from the physical strikes of a haptic hammering device and fed it to a 3D computer design program.

The hammer and software interface serves as both an outcome in itself and as an experimental digital hand tool. Fig.12. The process provides a new layer of interaction between hand and materials and between two and three dimensions through which previously unachievable forms can be made.25



Fig. 12 'Small silver bowl -1', Kathryn Hinton

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Another artist that pushes the boundaries of craft and traditional ideas is Lenneke Langenhuisen; she too has taken old craft techniques and given them a new life: she traveled to an island in the Pacific Ocean to study and document the ancient craft technique of beating bark fiber into a textile. Tree bark worldwide is a waste product with little use. Lenneke took this waste product and evolved this craft technique by strengthening the mulched bark fibers by employing textile techniques such as sewing and embroidery. This experience and process resulted in a new textile made from bark Fig.13

The project "Trade Union'<sub>Fig.14</sub> by Rachel Griffin explores the correlation between industrial processes and crafts on yet a different stage. By looking at an industrially produced biodegradable plastic made from potato starch, she developed a series of traditionally woven baskets. While the Solanyl plastic is industrially produced, it is naturally biodegradable. Griffin explains: "By using an industrially produced 'natural' material you suggest a new relationship between industry and craft; a marriage of industrial chemistry and traditional knowledge that allows for a more flexible system of production and design." <sub>26</sub>

The aforementioned artists, have strived for the perfect marriage between processes, techniques and materials. Hopefully these types of marriages become popular in the future of our objects around us.

Fig. 14 'Trade Union' by Rachel Griffin, image by Lisa Klappe, 2011

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"As a big container of organs our body contains.
It contains our being.
As a container of crafts, the silversmiths make a silver bowl.
He or she contains crafts.
As a container of craft and our food at the table, Corpus tells us a story of making in our daily lives.
Being a craftsmen and creating objects with you are making containing beings."

In my opinion it is crucial to work together. Not only with craftspeople, artist, designers and engineers but also with people from all walks of life. We should build on a solid craft narrative, and collaborate with like-minded partners who put the same emphasis on production values. MacDonald adds;

"More collaborations between craft heritages will come into play. Particularly as cutting-edge, craft will assume its place alongside these developments. There will be a greater focus on combining extreme technology with traditional craft, neither at the exclusion of the other." 27

I believe this cross-pollination of disciplines will broaden the field of corpus and it is where new ideas, solutions and processes can be found. Working together with glassblowers, silversmiths, and carpenters we can influence and observe each other's processes. By Taking the goodness from each discipline and mixing it up, we can create new objects with new 'DNA'. Both worlds of craft and industry have to come together and share experiences and knowledge. We can keep learning from the machine that makes perfect straight lines and the material used to make our water bottles. At the same time, industry can learn from the emotional value of the makers hand. In conclusion I envision the meeting point of the two shall never stop. It is a process that has already started within the field of crafts and design and it is an evolving process, a meeting point wherin a new way of making can be discussed and created.

In my Master work I will visualize this dialogue between the craft world and the industrial world in the context of corpus. By looking differently at the tradition of making corpus, which has a long history, and by juxtaposing this craft world to the industrial world, I will create a visual and tactile landscape in which aesthetics and materials of industrial and hand made objects are combined. These combinations of materials and processes will give birth to "new" Corpus with "multicultural" DNA.

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FIGURE



*Waterleather*', illustration by Amba Molly, 2011



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'Tutu' by Lenneke Langenhuisen, image by Erik and Petra Hesmerg, 2011

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