BODYWORKS

museum boijmans van beuningen

I am back at Museum Boijmans van Beuningen in Rotterdam for Design Column #5 – [Link] [Link]

Previous Design Columns – [Link] [Link] [Link]

Ideas that make a difference

Every three months the Design Column at Museum Boijmans van Beuningen focuses on a news item in the form of a small exhibition. The column is a place where new ideas are made visible, where the power of imagination is given expression. Designers and artists are especially interested in experimental imagination. With their idiosyncratic vision, they see things differently and are capable of bringing about change. The Design Column creates a space for these innovative concepts.

In conversation

The Design Column is not only a presentation but also an opportunity for reaction and dialogue. Everyone is cordially invited to participate in roundtable conversations. If you would like to participate in this conversation, you can contact the curators at designcolumn@boijmans.nl.

Blog Design Column

Accompanying each Design Column the museum keeps up a blog. Here you can find reactions and up to date information on the current and previous editions – [Link]

Design Column #5 is called

Body Building

Some scenarios about our physical improvement illustrate the need to make choices.

Here is the exhibition brief:

We are living longer and staying healthier. And although the opportunities to improve our bodies seem endless, the resources clearly are not. The half-yearly forecast issued by the Bank of the Netherlands on 10 June stated that the economy is taking longer to recover than expected. The budget deficit for 2014 is higher and another six to eight billion euros will have to be saved to satisfy European Union requirements. One cause is the rise in the cost of care. Worldwide prosperity means that people are living a lot longer – and they need more expensive care.


NRC HANDELSBLAD

Obama en Merkel, wereldleiders van het kleine gebaar
De Wereld

Edward Snowden, de oud-spion die niet kon zwijgen
In het nieuws 4-5

Broze economie blijft coalitie dwarszitten

Jan Cremer veilt persoonlijk archief

-0,8 %

3,9 %

6-8 miljard

Handzame dwarsligger cadeau bij iedere bestelling bij NRC Lux

Gratis!

Chin-A-Fo, H., Stokmans, D., ‘Broze economie blijft coalitie dwarszitten,’ NRC Handelsblad, 10 June 2013

Alongside the necessary cutbacks, however, the government continues to invest in health care. It was recently announced that the Dutch government is investing an additional 32.5 million Euros in research into dementia. This is in line with World Health Organization’s recommendation to give this condition priority in worldwide health care. At the moment 35.6 million people worldwide are suffering from dementia, but this number will have trebled by 2050. The condition will increasingly burden the Dutch social system, care system and economy. Despite all the cutbacks and deficits, it has therefore been decided to invest now in order to prevent worse problems in the future.

We have to make choices. Do we invest money and energy into one line of research and neglect another? Practical and strategic motives are factors here, but our moral compass also has to be constantly reset. How far can we go in adapting our bodies? And is this choice defined by the economic situation? Now that growth is no longer unrestricted, where do the desires

and boundaries lie?

Supporters of trans-humanism, for example, argue that we have arrived in a post-Darwinian era in which we can shape our own evolution. Trans-humanists strive towards becoming ‘post-human’ – a human being that has physically improved with the aid of computers, software, nanotechnology and genetic manipulation. The inevitable symbiosis of computer technology and the human body was the subject of The Matrix film trilogy (The Matrix, The Matrix Reloaded and The Matrix Revolutions from 1999 to 2003) but little by little it now appears to be becoming reality.

Elena Beelaerts – Suikerverbond /Sugarconnection. “A portrait of a friend. She is a photographer using her camera to ward off the fear of her body deteriorating, taking control by using the camera. In this piece her leather jacket, a photocamera, necklaces and drawings on paper and board are hanging from the ceiling.”

The horror – we have always been cyborgs

If we grow, in vitro, a human organ, if we replicate a liver, run its specification through a 3D printer, is it natural? For it was not born naturally. Is this liver more like a heart pacemaker, a steel pin in a once broken bone, an implant, prosthesis, an appendage, an addition, a supplement, a piece or product of technology? But surely technology is part of our human being, our nature.

Science fiction has long pondered the ambiguities and anxieties of such scenarios. In the movie *Invasion of the Body Snatchers* (the remake of 1972 is suitably set in counter-cultural San Francisco) alien forms appear as unusually appealing flowers in a fecund springtime. They are innocently picked and gathered and taken home, but this supplies the aliens with a sample of DNA, a template they use to replicate and replace their human hosts, who never wake up from their sleep. San Francisco succumbs to flower power.

If you were cloned, replicated in such an exact copy, would it be you? Identical twins have always attracted attention, but not usually anxiety. Is a clone of oneself not simply an identical twin born at a different time? What of androids, artificial life forms and artificial intelligence? Can such creations of human technology achieve parity with the human? Possess consciousness? Data, the android, the synthetic human in the 90s series of *Star Trek*, struggles to reconcile his materiality with human being while living on happy terms with the crew of the Enterprise. His twin, however, is not so well disposed towards humanity – his programming, his software was faulty.

We look inside ourselves and trace the invisible sub-molecular structures of living tissue, the DNA that many see as the very matter of our being. And the knowledge gained is the basis for intervention and engineering no different from the efforts of Mary Shelley’s Baron Frankenstein. The fear of genetic modification, part of the triumph of science, is that thereby will be created monsters like Frankenstein’s

creature that will turn against us. When the global computer system in the Terminator movie series goes global and achieves consciousness, it attempts to destroy humanity.

Does this capacity to engineer humans and other life forms take us into post-human, trans-human times? Some have argued that humanity has had such a great impact on the natural world that the powers and forms of nature have been usurped by humanity and we should call the era in which we live not the Holocene, but the *Anthropocene*. Both notions are perhaps a little too arrogant and anthropocentric and presume too much.

Our impact upon the world has only accelerated in the last couple of hundred years, with, of course, the bonfire of burning of the ancient fossil life, coal and oil and gas, that we call fuel. People have been burning forests to make way for farming and to manage the land for thousands of years.

Is biotech so new, so revolutionary? Are we only now seeing the realization of science fiction? Body augmentation and modification were there at the start. The first anatomically modern humans living in Blombos Cave in south east Africa nearly 200 thousand years ago wore necklaces of perforated shells. Prints of hands alongside cave paintings over thirty thousand years old show missing fingers removed in rites of passage, signaling belonging.

For as long as we have been human we have been tinkering with what it is to be human. Tools for hunting and fishing were prostheses, extending, augmenting human capability, with a flint blade an improvement upon tooth and nail. Plants and animals were brought into the home, made intimate, the dog as a companion species, domesticates selectively bred, genetically modified to provide more and better food, or to behave in a more appealing way. More and more parts of our lives have been delegated to things: tools and machines carry out work with and for us, and artifacts signal messages, from the displays of body adornment to writing systems that can record and convey speech, without us having to repeat and remember.

Most of our world is outside of our human frame. And the outside infiltrates: we have been colonized by bacteria essential to our digestive well being, and, of course, we must consume to survive. We are born into and inherit worlds of tangible things, intangible symbolic systems that generate meaning, infrastructures of

convention and agreement like language, networks of association with others that make us who we are. And which we reproduce in our everyday living: society and culture, tangible and intangible, only exist through our everyday projects and activities, and yet are the very condition of possibility for those plans and designs.

We have always been cyborgs, part organism part machinic control and implementation system, extended beyond ourselves, hybrid, in organized assembly with other species, with nonhumans, things, environments. As humans we have always been ecologies, *oikologies* in old Greek, where the oikos is hearth and home, extended household.

And this is indeed the stuff of horror. The current fascination with vampires and zombies is about the erosion of distinctions between the dead and the living, a fascination with mortality and morbidity, the transition of human to non-human. Cut me open – Am I merely the bloody flesh? How can this be so? Where is soul, consciousness, my identity and belonging? In the electro-chemistry of neurons? I am looking in the wrong direction, inwards instead of out and around. I am part of something bigger. We all reach out and connect with others, making the world in collaboration (and a collaboration with the dead), a world only comprehensible in its multiplicity, for any a solitary creation would only be sensible to me, and in such solipsism lies insanity. To find the human we need to look at connections and distributions, assemblages and entanglements of all sorts of often strange forms and entities, past and present.

Just who do you think you are? – the human in human-centered design

Our selection of works in Design Column #5 delve deeply into these bio-cultural mélanges, products of millennia-long co-evolution of our biological and cultural selves, into these disconcerting interstices, and with a powerful design sensibility.

Design has typically been associated with styling and branding – giving outward shape and form to a product that connects with a certain look (such as the clean lines of Scandinavian interior design), certain philosophies (that form should follow function, for example), and meanings (the association of certain materials with high tech or with a sustainable economy perhaps).

Human-centered design focuses upon people – their needs and desires, rather than the intrinsic form, function and symbolism of a product. It began in the 60s with a concern that product design pay appropriate attention to physiology, to what were called human factors – ergonomics ensuring chairs and tables actually fit people's purpose, at the right height and angle. Research into psychology and cognition informs designers, especially in the computer and software industries, of how people connect and interact with the things in their lives – user-centered design. A service economy has demanded understanding of experience and emotional dispositions, attending, for example, to how people feel and experience an emergency room in a hospital, in order that not just the healthcare instruments but the whole experience be designed to better serve people.

Design process rather than product. Seeking answers, in the way of designed artifacts, interactions, experiences, to questions of need and desire, has turned the light on the design process. Careful attention, watching people in their everyday lives, inquiring and recording in ethnography are the essential research bases of human-centered design. Then establishing need and desire, working with people through trials and prototypes to move iteratively towards design solutions. Such a design process, often called now design thinking, has been refined over the last decade into a subtle pragmatics that can be applied to any design challenge that requires innovative solution.

Our designers in Design Column #5 are at the leading edge of this shift of attention to human-centered design, asking – Just what is the human (in human-centered) design? Just who do we think we are? And they all adopt a questioning, critical, research-based, experimental, adaptive disposition. Design Column #5 represents *design as research lab*.

Some also use mockery, transgression, extending limit cases, exploring what happens if you take things further. Imagine symbiosis with your pet, with the companion species in your life, as is suggested by Cohen Van Balen. Evident also is a certain amount of shock that comes from challenging complacency. So you think that the world can support 20 billion people? Only if they're 50 cm tall! Arne Hendriks is almost Brechtian in this *verfremdungseffekt*.

Taboos of containment and growth

In their deep questioning of our human being, our ontology, asking just what it is to be human, the works gathered here challenge two assumptions. The first concerns individuality and is that our skin is a fundamental boundary separating our self from others, be they other humans, animals, plants, or things. The second is that growth is about increase, a quantitative measure. It is difficult, even taboo to hold that my cognitive functioning is not in the chemistry of my brain, or that economic policy should not give priority to growth in production and income. How could I not nurture my children with the foods and goods that will make them bigger and stronger than the less affluent? Yet we are collective social and cultural beings extended back in time through genealogy and history; and indefinite economic growth is unsustainable because the Earth is simply not big enough.

Design experiments

The descriptions applied to their designs by Revital Cohen and Tuur van Balen capture these ambiguities and tensions. They sound almost like wonderful oxymorons to accompany bio-tech: designer species; composed wilderness; mechanical organs; bespoke metabolisms; poetic machines. Human-machine, human-non-human symbioses are presented as research experiments. On exhibition is a remarkable video of a dialysis machine performing its work of an organ, while we listen to those who live with the machine share their experience.

Cohen Van Balen: Life Support: Respiratory Dog

Respiratory Dog offers the prospect of a retired greyhound, with great lung efficiency and capacity, as a human prosthesis, helping one breathe.

Assistance animals – from guide dogs to psychiatric service cats – unlike computerised machines, can establish a natural symbiosis with the patients who rely on them. Could animals be transformed into medical devices?

This project proposes using animals bred commercially for consumption or entertainment as companions and providers of external organ replacement. The use of transgenic farm animals, or retired working dogs, as

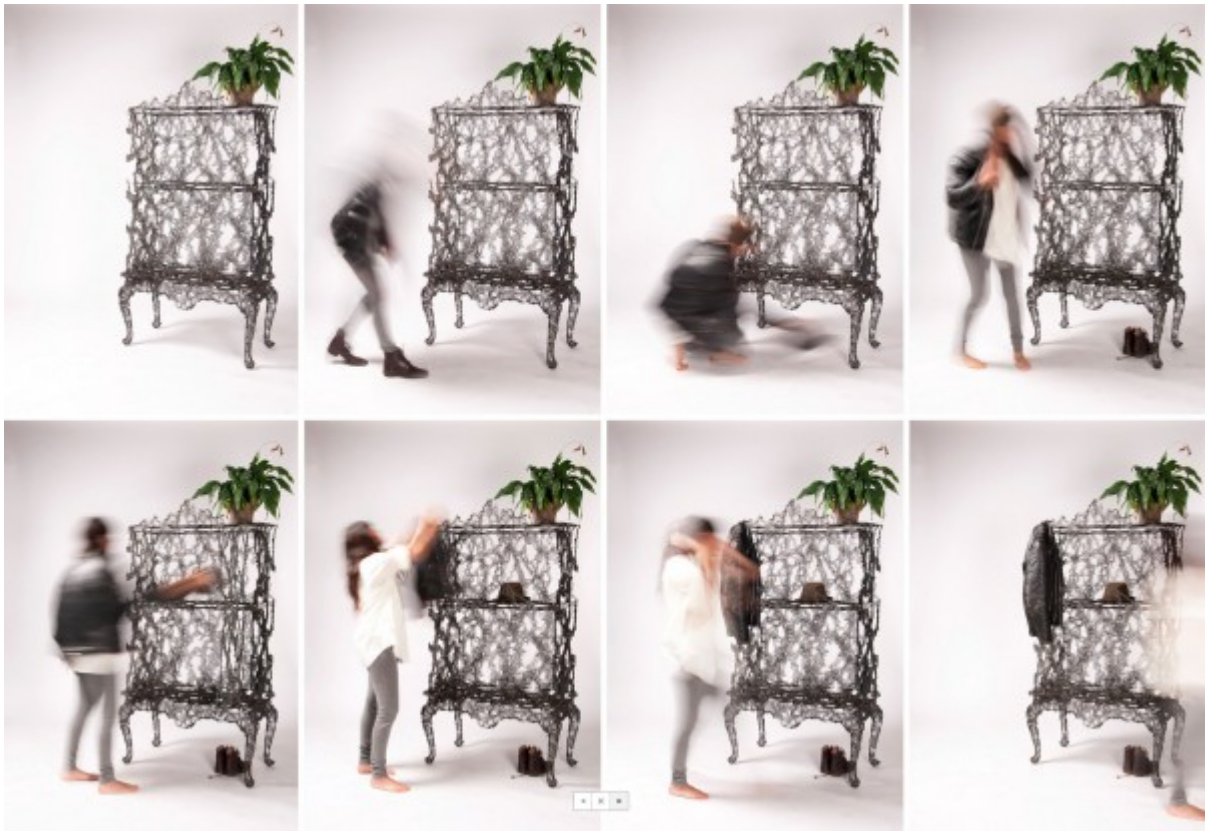
life support ‘devices’ for renal and respiratory patients offers an alternative to inhumane medical therapies.

Could a transgenic animal function as a whole mechanism and not simply supply the parts? Could humans become parasites and live off another organism’s bodily functions?

Scary Beautiful by Leanie van der Vyver from Design Indaba on Vimeo.

Leanie van der Vyver, with her Scary Beautiful shoes, asks – What if? What if shoes worked in a different way? Here is a prototype for another mode of comportment.

For are not the conventions of dress, posture, comportment, these techniques of the body, not learned, passed on, and thereby ultimately transient? The Scary Beautiful interrupts and asks – Is standing, walking, a matter solely of the human frame? What of the shoe, and the floor? And what they are made of? We walk, run, creep, and all involve surface, contact, the interrelationship, the conjoining of person, articulating form, mediating material and form. Mobility is not just movement, but to reach out, lean, stretch, extend, connect, and always thereby to ex-press, however awkwardly.



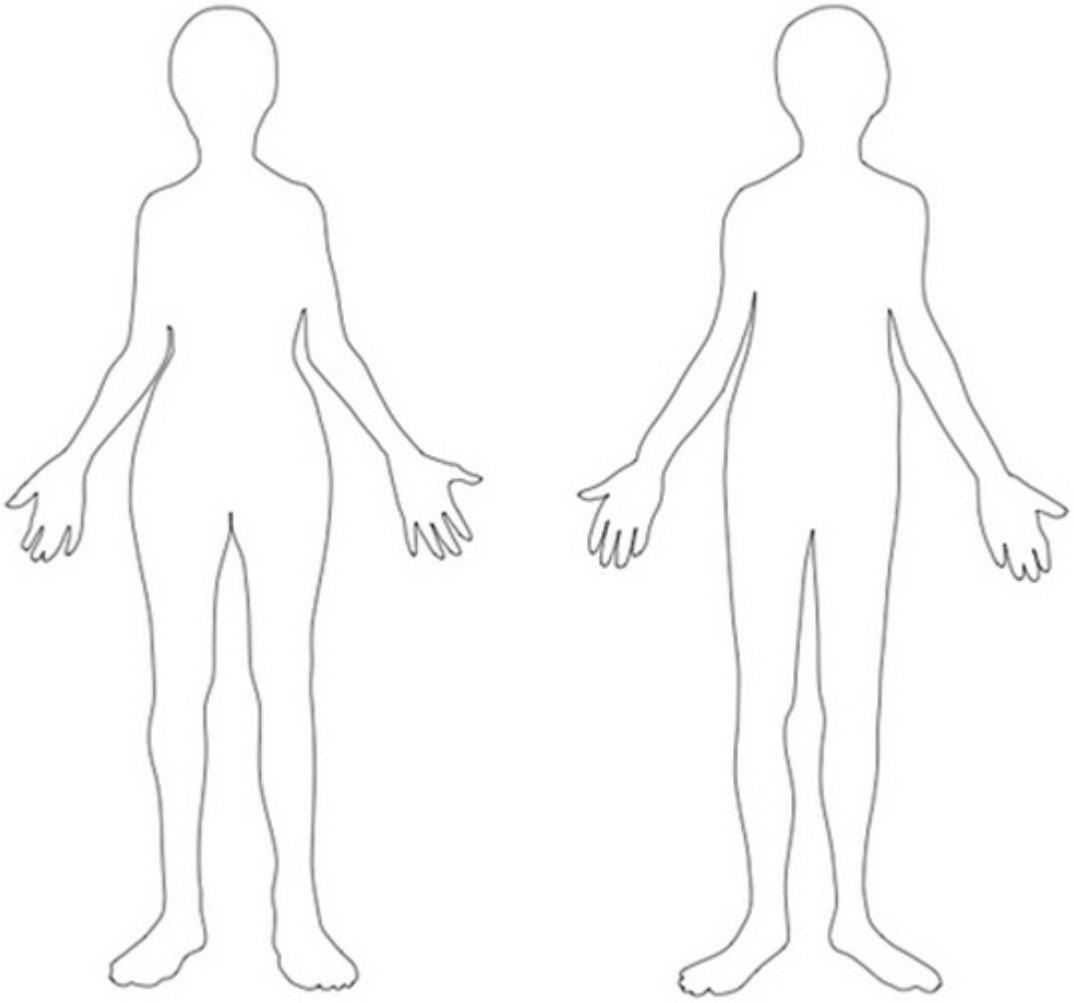
Studio Makunpoika: Engineering Temporality.

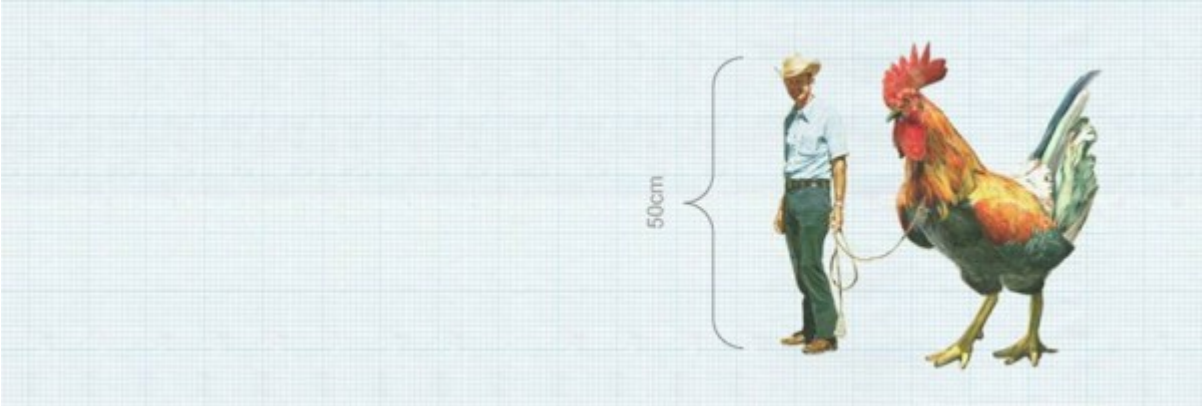
Studio Markunpoika names the project on display *Engineering Temporality*. It is a metal lattice that remains after the wooden cabinet it covered, that was its basis, was burned away. I suggest that the title doesn't do justice to the poignancy of such a piece. The cabinet lattice is metaphor – a shell that remains after its living heart is removed. Tuomas Markunpoika is reflecting on the loss that accompanied the dementia of an aging family member.

The cabinet embodies an archaeological sensibility, one tuned to the transiency of things, to how we always only ever work with the remains of things. The processes of (archaeological) time include the effort to sustain composition and form against inexorable entropy and decay, whether that be our perceptual hold on life and memory that succumbs to age and all too often to dementia, or the transforming and eroding powers of nature manipulated in engineering and manufacture. Time is embedded in the being of humans and non-humans together; it is not just an abstract and neutral medium in which things happen. Memory is creative performance, not a simple record of the past: we re-collect, rework, retell, and so the past changes in its articulation with our present attention. Our efforts to make sense of our pasts in memory are resistances to eroding, fragile, fugitive, fleeting time. Our

efforts in memory and making things to resist entropy, loss and decay assert our agency, assert that we can make a difference. But there is no escaping failure.

Arne Hendriks' Swiftian allegory of the *Incredible Shrinking Man* is an optimistic contrast to the melancholy of *Engineering Temporality*. Research-based, creatively obtuse, it uses one of the most powerful components of design thinking – going to a provocative extreme and daring to ask, as does Leanie van der Vyver – What if? What if we decided to become smaller? Perhaps 50cm? And then crucially following through to the consequences, experimenting rather than accepting an instant answer.





Arne Hendriks: Incredible Shrinking Man

What will the human species look like if we decide to shrink to 50cm? Will we shrink proportionally, or is it more realistic to anticipate on subtle, or dramatic, changes to the human physique? How do aesthetic desires influence developments, and what are the ramifications of biological principles? How will the simplification of physical function manifest itself in body design and how large will the head need to be to retain intelligence? Who is best equipped to answer such, and many other, questions? The scientist? The artist? The trained professional, or the unprejudiced amateur? In the Golem Studio, The Incredible Shrinking Man wants to facilitate the collective fantasy on the appearance of the 50cm person. It invites specialists and generalists from various fields of interest to sculpt from clay the 50cm body as they envision it. Through their imagination we hope to connect to a layer of knowledge,

perhaps embedded within every human being, of a tiny past (life started small). The results are documented, analyzed, and displayed to form a collective contemporary opinion on the appearance of the man of the future. Together with our many historical fantasies of the small, the most intriguing examples from reality, as well as scientific probabilities, the clay figures form an image bank to inspire the human body of the future.

call it sleep -a short portrait- from Elena Beelaerts on Vimeo.

Elena Beelaerts explores the human as assemblage, as multiplicity. Human coherence (though we might use the word “integrity”), conventionally understood as body and the descriptors and categories of our identity, dissolves in her efforts to compose, represent, and capture. Things and events that gather around our activities make us what we are. And they are never but mediated. Elena assembles, draws, collects, and offers video representation of such entanglement in event.

We are many, always beyond ourselves, projected forwards in hopes and fears, backwards in reconciliations and justifications, through indeterminate gatherings. Design Column #5 invites us to see into the life of things, for that is what we are.

Thanks, as ever, to Annemartine van Kesteren and her superb team at Boijmans.


DESIGNCOLUMN