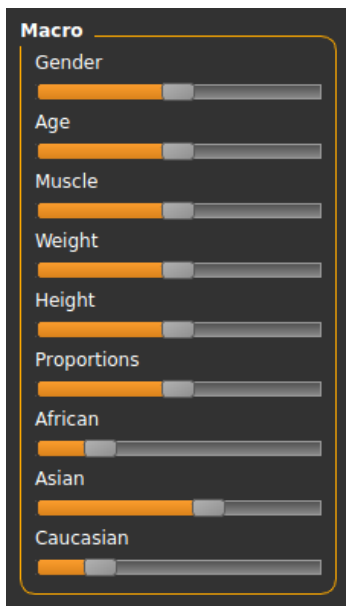


MakeHuman | ReMakeHuman

Workshop zur 3-D-Modellierung von humanoiden Körpern

Am 18.5.2017, Lehrstuhl für Wirtschaftsinformatik (Prof. F. Lehner)



This workshop is organised around a concrete software. It has the curious title MakeHuman and is a popular Open Source computer graphics program for modeling 3-dimensional humanoid characters. We will be studying the software itself, experimenting with what it can do and see if we might make it do things differently.

MakeHuman has been around for almost ten years and is actively developed by a community of volunteer programmers, algorithms, modelers and academics. It presents itself as 'middleware' because the characters prepared in *MakeHuman* are usually further developed in *Blender* for example.

MakeHuman is relatively easy to use, coded in Python and targets first of all amateur animators to prototype humanoid modeling. It is also used by scenographers for the creation of museum displays, by engineers for testing multi-camera systems and by game-developers for the creation of bespoke characters.

The signature feature of the *MakeHuman* interface is a set of horizontal sliders. These sliders suggest that by interpolating gradients for gender, race, weight and age, any 'human' representation can be 'made'. When you think a bit longer about the neat arrangement of properties, you understand that something strange is going on. Further inspection of the software reveals a limited topology based on reduced humanist categories that render the initial promise of infinite differentiations an illusion.

What is sadly made invisible in the *MakeHuman* interface, is that these digital characters are actively produced by a collective of humans and non-humans. These bodies, presences and relations are co-constructed, but the tool does not make any space for wild combinations or un-normative renders. It promises endless hybrids, but the results all grow ordered within a limited and restricted field of cultivated possibilities, presented to us as 'natural' and 'transparent'.

In this workshop we will work together to try and replace the understanding of these bodies as somehow human, and made by humans, by an acknowledgement of the complicity between the various agents at work, an awareness of the mutual motions between imagination, gestures and machines.

What if we take these tools serious as digital companions, can we understand *MakeHuman* as a site to imagine relations between humans and machines? How could we make the practice of co-design more explicit? What could be the effect on the resulting representations itself, and what interfaces can we invent to show the collaboration in operation?

MakeHuman and *RemakeHuman* are inventoried as item no. 017 and no. 045 in the Possible Bodies Inventory, a collaborative research project that is concerned with intersecting issues of race, gender, class, species, age and ability which resurface through the performative as well as representational practices of 3D scanning, tracking and modeling.

PROGRAMME

09:00 **Introduction:** *MakeHuman*, *ReMakeHuman* and The Possible Bodies Inventory

10:00 **Installing** *MakeHuman* and getting familiar with it: interface, operations, files.

11:00 **MakeMe**

Generate a humanoid character based on measurements and observations of yourself.

12:30 **Break**

13:30 **Collective software research**

We divide over four duos/groups and start a round of collective explorations of the *MakeHuman* software. Each duo documents their findings on-line. Some research might overlap as it touches each of the four research threads. Remember to link conceptual questions to technical and practical explorations, so dig into source code, try out features, make screenshots, be sensitive to terminologies/language and invent small experiments.

- *Skeleton, skin, mesh* (topology)
- *Sliders, norms, boundaries* (parameters)
- *Moving with MakeHuman* (assembly)
- *Representation, rendering* (humanoids)

16:00 **Presentations** and collecting ideas for items to be added to the Possible Bodies Inventory.

17:00 **End**

- Software: <http://www.makehuman.org>
- Code: <https://bitbucket.org/MakeHuman/makehuman>
- Rocha, Jara, Snelting, Femke. *MakeHuman* in: Rosi Braidotti (eds), *The Posthuman Glossary* (forthcoming)
http://snelting.domainepublic.net/files/MakeHuman_PostHuman.pdf
- Possible Bodies Inventory: <http://possiblebodies.constantvzw.org>

Femke Snelting

Femke Snelting develops projects at the intersection of design, feminism and Free Software. She is member of Constant, a non-profit, artist-run association for art and media based in Brussels. She co-initiated the design/research team Open Source Publishing (OSP) and the Libre Graphics Research Unit (LGRU) to investigate how digital tools and creative practice might co-construct each other. With Jara Rocha she develops Possible Bodies, interrogating the concrete and at the same time fictional entities of "bodies" in the context of 3D tracking, modelling and scanning. Femke was an Art, Science and Business fellow at Akademie Schloss Solitude and currently teaches at a pass (advanced performance and scenography studies, Brussels) and Piet Zwart Institute (Media Design: experimental publishing, Rotterdam).