# creating people for products

background

humorous homunculi in the service of design communication workshop

In designing pleasurable products, designers need to integrate insights, knowledge, and intuition about experiences the prospective users of their products can, do, and ought to have. An important part of this information is formed by people's past and present experience with products.

Although there now exists a successful and growing arsenal of methods to bring such information to the foreground (e.g., [1], [2]), there is still a gaping need for new techniques of organizing, retaining and presenting, and keeping alive the findings of such studies ([3], [4]).

Such communication tools should keep the design team inspired, therefore they should motivate people to make them, draw inspiration from them, and keep referring back to them.

This poster presents a small, ludic attempt at such a communication form, in which we summarize the analysis of shortcomings of an existing product in a humoristic, yet genuinely informative and inspiring form. In itself it is inspired on homunculi as a visualisation form, and uses the design of such homunculi as a generative form of analysis.

The title of the workshop was a pun on the Faculty of Industrial Design Engineering's then mission statement: 'creating products for people', which has since been extended to better reflect the interests of business and product experience into 'creating products people love to use'.

In a short afternoon workshop, two teams repeated Buxton's exercise for two existing products: a mobile

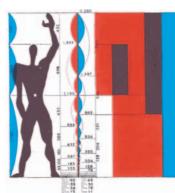
phone and a SUV. First they listed what were the strengths and weaknesses of the products' interface. Then a design for an optimal user was made that integrates and expresses the most important points in the list. In designing the user, the design teams were encouraged to take sci-fi liberty, to convey the most relevant information, and to apply humor and silliness without sliding down to 'just a joke'. The resulting homunculi were intended to remain inspirational for a design team working

on a next generation of the product they were assigned. Analysing, making, and presenting took the teams of 5 approximately 90 minutes

of jocular design study.

### homo ergonomicus

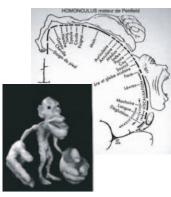




Probably the most famous picture of what the male human body proportions are was made by da Vinci [4]. It formed the ideal for Western painting for several centuries, and formed the expressive basis for ergonomic measures such as le Corbusier's Modulor [5].

### homo WIMPi

## homo tactilis



Penfield [6] studied the resolution of our touch sensors in the skin over our bodies, and the sizes of brain areas connected to these skin parts. He expressed this in the 'man on the brain': sensitive parts of his body, e.g. fingers, lips, are scaled up, insensitive parts (upper and lower arms) are scaled down. The homunculus is a concise summary of these human skills, and a visualisation that never fails to amuse people.



Bill Buxton [7] expressed his exasperation about the lack of progress in 20 years of computer interface design by sketching what the ideal computer user's senses and effectors would be. It expresses strongly how little use the Windows, Icons, Mouse & Pointer interface makes of the sensory and expressive skills of people.

### homo cellularis





For the user of a mobile phone, the human form is less recognizably humanoid. Prominent feature is that the user carries the telephone on its ear/eye and its 'hand', an array of fingers ready to the keypad. Its mouth may be located quite a distance from the phone, and its brain is artificially kept far away from the phone (for fear of radiation). The wheels on either side accentuate the mobility of the user, which is seen as the key behavioural asset of the product.

### homo hummeronis

The homunculus for the Hummer SUV draws attention to the visual and communicative load on the driver. It has one large eye to attend to the road in front, and a set of small eyes representing the continuous glances in rear view mirror, console, and conversation with fellow travellers. Only one arm, located in the middle of the chest, is needed to operate the steering wheel, whereas the legs (which normally contain people's strongest muscles) can be completely limp.



### conclusions

The homunculous expressions proved powerful reminders of the product analysis: months afterward, participants could list the important points again when shown pictures of the models. We believe that this is the strength of putting the analysis into a motivating, narrative unity appealing to the readers' empathy (the viewer is invited to imagine experiencing life as that person), as its operational principle, just as in narrative techniques as personas and scenarios [8].

- [1] Gaver, B, Dunne, T., Pacenti, E. (1999), Cultural Probes. ACM Interactions, 6(1), 21-29.
- [2] Sanders, E.B.N. (2000), Generative tools for Co-designing. In: Collaborative Design, Scrivener, Ball and Woodcock (Eds.) Springer, London.
  [3] Sleeswijk Visser, F., Stappers, P.J, Van der Lugt, R., & Sanders, L. (2005). Contextmapping; experiences from practice. Codesign, 1, (2). In press.
- [4] Wakeford, N. (2004). Innovation through people-centered design lessons from the USA. dti global watch mission report, October 2004.
- [5] Le Corbusier (1955) Le Modulor. Birkhauser, Basel.
- [6] Penfield W, Rasmussen T. (1950) The Cerebral Cortex of Man. A Clinical Study of Localization of Function. The Macmillan Comp, New York.
- [7] Buxton, W. (1986) There's More to Interaction than Meets the Eve; Some Issues in Manual Input. In Norman, D. A. and Draper, S. W. (Eds.), User Centered System Design: New Perspectives on Human-Computer Interaction. Lawrence Erlbaum Associates, Hillsdale, New Jersey, pp.
- [8] Pruitt, J., Adlin, T., (2005) The Persona Lifecycle: Keeping People in Mind Throughout Product Design. Morgan Kaufmann, In press.





