

"Fantastical Bodies and How To Wear Them"

INTRODUCTION AND AIMS

"Fantastical Bodies and How To Wear Them" is an interdisciplinary art science project that features depictions of 'alien bodies', and the planets these creatures live upon. The aliens are creative hybrids of terrestrial non-human animals, and each creature-set (one set per planet) is composed of several figures on a continuum starting with a recognisably human character to a more 'fantastical' one. Those who participate in the experiment will be provided with information about the planets, along with drawings of the aliens. The participants will then be asked a series of questions, one being: "if you lived on this planet, which body would you choose to inhabit?"

Based on existing research (McKenzie et al, 2019) we expect there to be a correlation between a participant's existing body image, and the choices they make regarding the aliens, with those possessing a negative body image (raised body concern and low self-esteem) being less likely to identify with the most alien creatures. One aim of the project, then, is to test this hypothesis experimentally.

Another, important aim of the project is to seek a proof of concept for the claim that 'art skill' (conceptual and visual) can help facilitate good science. The art skills that will be tested in this way are those used to imagine and represent the 'alien beings' of the project title, including lateral and critical thinking. It is this second aim that will be addressed by this research poster.

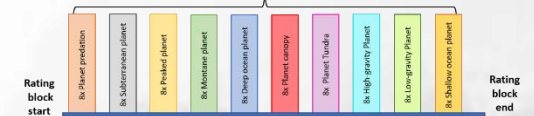
Using the mouse, please adjust the slider to rate how likely this body is to survive and thrive in the environment shown. Ratings are from 0-not at all likely, to 100-very likely.

Montane Planet - Rocky cliffs, tall trees, and small cramped clearings with uneven ground make up this planet's biosphere. Predators that are successful here can navigate rocky and wooded terrain with ease, hunting animals resembling Earth's rabbits and mice.



Not at all likely 0 20 40 60 80 100 Very likely

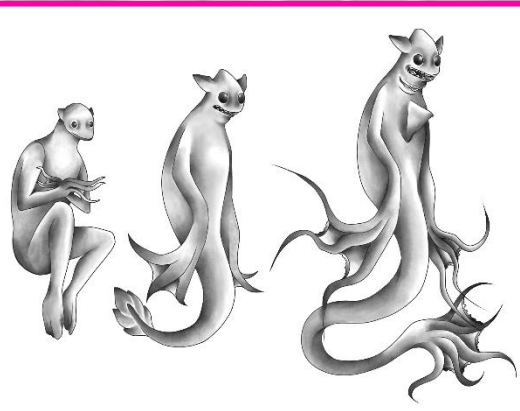
80 trials, Counterbalanced



METHODOLOGY

Our method for producing the alien figures and their environments utilized that approach known (within the genre of Science Fiction) as 'science-fiction prototyping', or 'world building' (Haraway, 2016). In other words, we attempted to build an internally coherent relationship between all the elements within each world; the characteristics of the environment, for instance, a planet covered by deep oceans, was matched-up to the octopus-like physiognomy of the alien creature who lived there. We developed a systematic approach whereby an existing earth-animal was used as a starting point and hybridized with a human figure so as to create each series of aliens. The aim was to have each figure be recognisably different from the next, but at the same time be stages in an 'evolution' from the recognisably human to the distinctly alien. We, therefore, combined creative imaginative processes with a systematic rigour.

Our methodology for assessing the use-value of our world building efforts for the psychology project can be described as informal group-ethnography. We have constantly discussed our artwork with the psychologists involved and incorporated their feedback, in so doing we have been able to recognize the contribution our work was making to the experiment as a whole.



FINDINGS AND RESULTS

We have proven the hypothesis that artists and the art they produce can be useful additions to teams of scientists designing empirical experiments.

We have three interrelated findings:

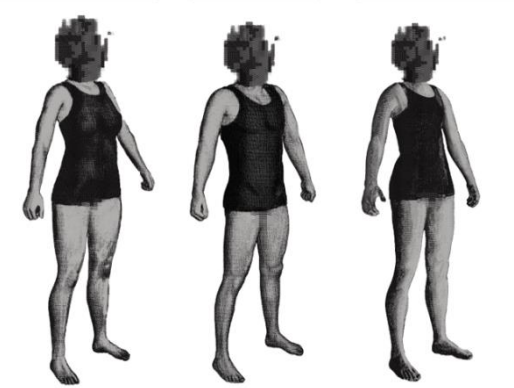
1. In Fantastical Bodies and How to Wear Them the artists successfully took on the role of imaginative-image-generators for the psychologists. The psychologists were able to leave this component of the project to us (artists) and concentrate on other aspects of the experimental design.
2. The artists established that they can be both imaginative and systematic in a way that makes them useful collaborators in producing empirical experiments.
3. Artists work closely with images. In Fantastical Bodies... having artists involved drew attention to the multiple ways that images themselves might affect the outcome of the experiment. The artists drew attention to issues concerning the "attractiveness" or otherwise of the alien figures, issues concerning the appropriate anatomical detail of the figures, etc., etc. This attention to this 'pictorial detail' was useful because it has enabled the team to subtly alter the experiment, in an ongoing fashion, to ensure that it does test or measure those features of body image that are its intended target.

CONCLUSIONS/RECOMMENDATIONS

We recommend that there be many more interdisciplinary projects involving both artists and scientists than currently is the case. In Fantastical Bodies artists were able to contribute to an experiment design via the production of images, but, we see no reason why this contribution shouldn't be extended so that artists use their creativity and rigour to help scientists formulate their hypotheses and work out appropriate experiments to test them.

ONGOING RESEARCH

We are now ready to run the first experiment, wherein people are asked to choose alien bodies from a screen. After this we plan to build 3-D digital versions of the aliens, which, an experiment-participant will be able to inhabit; the avatars not just selected but experienced, by way of a VR headset, from a first-person perspective. We believe that this step might facilitate therapies. There is evidence to suggest that exposure to this kind of 'body illusion' can have affective and attitudinal consequences (Maister et al., 2013). What if time spent inhabiting an alien body actually reduced anxiety vis a vis one's existing body image?



References

- McKenzie, K. et al, (2019). Distorted body image influences body schema in individuals with negative bodily attitudes, *Neuropsychologia*, Volume 122, January 2019, Pages 38-50
Haraway, D. (2016) *Staying with the Trouble: Making Kin in the Chthulucene*, Duke University Press
Maister et al., 2013 Experiencing ownership over a dark-skinned body reduces implicit racial bias, *Cognition*, Volume 128, Issue 2, August 2013, Pages 170-178

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