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Original Citation

Carter, P J and Gibbs, R J (2013) Using horrific body and avatar creation as an extension of the Proteus effect. In: 2nd Global Conference: Body Horror – Contagion, Mutation, Transformation, Friday 1st November 2013 – Sunday 3rd November 2013, Athens, Greece.

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DRAFT: HORRIFIC AVATAR CREATION AS AN EXTENSION OF THE PROTEUS EFFECT

Using horrific body and avatar creation as an extension of the Proteus effect.

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Abstract

Avatars, within the context of online interactions and video gaming, are representations of the user, selected and potentially created by the user. These can be full and realistic 3D representations of an individual for virtual environments (VE's) and games, 2D head shots for online forums or even fantastical and monstrous creations. Avatars can be accurate representations of the individual, aspirational or separate from their own physical characteristics.

Avatars are often functional but can have effects beyond the simple purpose of allowing a user to have an identifiable representation. The Proteus effect (Yee & Bailenson, 2007) suggests that the creation of an avatar with certain characteristics can change the behaviour and self-perceptions of the individual. In the literature this is often linked to positive impacts such as empowerment through gender selection, and increased self-confidence through the creation of a desired 3D body.

There is arguably less focus on the Proteus effect when reversed; when the characteristics of avatars and online bodies are used or shape behaviour negatively. Something the authors would tentatively label the Frankenstein's Monster effect. When avatars and online bodies are perceived to be horrific, and are treated as such, behaviour can be shaped to conform with these new expectations just as the horrific visage of the monster in Shelley's work led to its rejection, and ultimately the horrific acts it committed.

Using examples from online and 3D avatars we explore the modern Frankenstein's Monster, and consider how we can further research this area as an addition to the Proteus effect. We focus in particular on the creation of full 3D bodies in games such as 'The Sims' and how negative creations can lead to negative narratives within the game, as well as the creation of horrific or lewd monsters in the community based game 'Spore' as a form of online vandalism.

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Body image has a long history as a literary device. The concept that the physical characteristics are linked to or influence personal and behavioural attributes is common place, and the interaction between body image, self-perception and ultimately character behaviour is central to many gothic novels such as Shelley's 'Frankenstein; or, The Modern Prometheus' (1818), Wells' 'Invisible Man' (1897) and Lewis' 'The Monk' (1796), to name but a few. It is a common literary trope.

This link between the physical and the psychological mirrors to an extent the biblical concept of 'sins of the father' where visible physical ailments such as leprosy were assumed to be a judgement from God for the sins of a previous generation (Exodus 34:6-7, ESV; Paulson, 2007). This supposed visible mark of sin then determined how such individuals were treated by society. Again this carries through in 'Frankenstein' with the horrific visage of the monster being linked to the criminal past of the body parts donors.

The concept of judging an individual's worth and potential behaviour based on physical characteristics is one that is not alien to Psychology. Beyond the 'folk' Psychology of not judging a book by its cover much research, especially in the area of physical attraction, has been conducted. Great importance is often placed on these initial physical based judgements, even when conflicting or additional information is added later. The 'Matching Hypothesis' suggests humans attempt to match romantically with others who are as attractive (or are more than) themselves (Hatfield et al., 1966) and that physical attractiveness is deemed more important when determining satisfaction from an initial meeting than the compatibility of intelligence or personality (Walster et al., 1966; Berscheid et al., 1971). This

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can be extended into areas such as political and moral judgements. Participants are more likely to select political candidates that are ‘able-looking’ (Rosenberg et al., 1986; Rosenberg & McCafferty, 1987) and we make judgements about morality and guilt are swayed by perceptions of physical cleanliness (Lee & Schwarz, 2010; Zhong & Lijenquist, 2006).

Until recently though not a great deal of research has focussed on the interaction between the initial judgement and the individual’s reaction to this judgement, and any potential changes in self-image/concept. A key debate within novels such as ‘Frankenstein’ focusses on whether the monster is monstrous because of its innate nature (being composed of the horrific body parts of criminals) or because of society’s kneejerk reaction to its horrific but personally irrelevant visage. Historically Psychological research has been unable to investigate this interaction in depth due to limitations, both practical and ethical, in experimentally manipulating an individual’s physical body – horrifically or otherwise.

The Rise of Avatars, the Proteus Effect and Modern Research

The rapid changes in both available hardware and software have led to a change in how we can represent ourselves and where we can represent ourselves. The use of the internet has allowed for online communities to form and develop, and for virtual worlds (visual and text based) to become prominent. Communities such as ‘Second Life’ or ‘World of Warcraft’ are vast in terms of engagement, economic terms, virtual real estate, and for our purposes the freedom of physical representation when creating a personal avatar.

Avatars typically are visual representation of an individual that is separate, not necessarily distinct and different, from their physical appearance (Baylor, 2011; Kolko, 1999;

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Suh, Kim & Suh, 2011). They can often be altered as the individual sees fit. They are used often online to represent individuals on forums, chat rooms, instant messengers, blogs, MMORPG's and other social media. Regardless of the main purpose of the avatar (in game character, member identifier etc.) they are all involved in the process of interactions between members of an online community.

This involvement has led to specific investigation. There is increasing evidence that avatar properties can affect not only the interaction between online individuals but also affect the behaviour and perceptions of the avatar user in question. Yee & Bailenson (2007) conducted two experiments, one in which participants were assigned avatars of varying levels of attractiveness and a second in which participants were assigned avatars of varying heights. Those were avatars that were more attractive maintained less interpersonal distance from other avatar users, and were more intimate with self-disclosures. Participants with taller avatars behaved more confidently during observed interactions. This changing influence of the avatars physical characteristics on behaviour was termed the Proteus effect by the others (though they stress in this instance the effect is independent of the perception of others).

Similar results have been found by Castronova (2004), Jin (2011), Lee (2009) and Smith (2010), in the areas of avatar attribute value, avatar empathy and pro-social behaviour, threat responses and expression of trust, respectively. The majority of this research appears to focus on the positive use physical avatar characteristics or characteristics that fall within a 'normal' range. In comparison there is little focus on the effect of horrific avatar and online body representations on interactions, individual behaviour and self-image. The authors argue this is an area ripe for investigate now we finally have online representations that can be experimental manipulated without the practical and ethical issues that have historical

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obtained. The classic Frankenstein's monster debate can now be explored. In the following sections we present several examples that demonstrate potential areas of investigation across two different avatar experiences.

Personal Narratives with 'The Sims'

'The Sims' series of computer games consist of controlling the day to day actions of an individual (see figure 1) or family group within the context of a virtual home, situated within a virtual neighbourhood populated by other 'Sims'. As the game has developed so has the level of complexity in game play and visual representation. There are a huge number of potential physical characteristics and interactions, and later versions of the game include lifetime aspirations for a players Sim to achieve.



Figure 1 - Example of a Sim from the 2010 'Chinman' 4chan.org thread

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The player's Sim can be used to represent them within the virtual world or an entirely separate persona can be created. All scenarios are relatively common and the online community around the game encourages the submission of stories or narratives, supported by visual evidence, based on these avatars. The game itself has a scrapbook and photo taking facility which allows a logging of events.

The Narrative of Serial Sim Killer

In 2010, a series of images were posted on the 4chan.org forum site describing the story of a user's Sim. Initially they presented just a few images of their Sim, and their initial romantic rejection by another. The general reaction to the Sim avatar was negative. The Sim was described as having eyes 'filled with hatred', and '...THE GRIEF OF A THOUSAND WORLDS', that they were 'creepy' and that 'With a chin like that it's [*the rejection*] no surprise. FOREVER ALONE'. The comments predominately focussed on the perceived negative physical characteristics of the Sim (the term 'Chinman' becomes common) and allusions are made to related negative psychological status. The original poster of the Sim then followed up with several posts depicting the developing in game narrative. This initially described the social isolation of the Sim, and the in game romantic rejection by another Sim before moving onto a change in the Sims physical characteristics and social status. Finally the narrative cumulated in a Sim instigated house fire that trapped and killed the other Sims that had, like the posters on the forum, rejected the poster's Sim (see appendices A-C for a selection of the archived thread).

Though there is an element of playing to the gallery, a series of broad stages in the narrative can be identified. First there is the initial reaction to the physical characteristics of

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the avatar. Though the body of the Sim is not traditional horrific or monstrous it is however deemed to breach the positive norms as determined by the users of the forum. The second broad stage involves the link made between the physical characteristics of the Sim and the expected behaviour and role of the Sim. The third and final stage involves the conforming of the players Sim to the role suggested by the initial reaction to the avatar of the Sim. This cycle of stages is also seen within the narrative as instigated by the player; their Sim undergoes a physical transformation as they change their overall avatar appearance (clothes and hair) and in doing so this also alters their behaviour (the Sim enters a relationship with another rather than continuing their social isolation within the game).

Two interesting parallels can perhaps be drawn here, Psychological and Literary. From the Psychological perspective potential indicators of the Proteus can be seen. The perception of the Sim is negative, this in turn leads to a change in behaviour that conforms with the expectations raised by the physical. Although not physically horrific the Sim becomes psychological horrific, and a monster within is released through the transformation. This in turn leads us to the literary parallel – much like Frankenstein's monster the Sim is not only socially rejected and labelled a monster but the Sims behaviour eventually conforms to the horrific standard set. At the end of 'Frankenstein' the initial rejecter of the monster, Viktor, is set ablaze. Here the initial rejecter of the Sim, a Sim which the players Sim had romantic intentions for, is trapped and killed in the house fire.

Spore as a platform for online body horror vandalism

Spore is a game which centres around the physical transformation and evolution of player controlled life forms. These start as small basic creatures (see figure 2) within a

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primordial ooze and then and move through several game stages (land creature, tribe, city state, world civilisation, intergalactic civilisation) and forms (see figure 3).



Figure 2 - Example of two basic Spore creatures



Figure 3 - Example of a more advanced Spore creature

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The physical characteristics of the creature created by the player are arguably the most important part of the game mechanics. A huge range of in game physical features, additions and quite detailed avatar editing allow for a huge range of creative creatures to be created. Some may be completely novel, some may ape known creatures (real and fantasy) and others may attempt to create human representations (accurate and horrific).

These creations can be shared between individuals but a key feature of the game is the community nature of the creation sharing within game. A creature created by one user can be automatically downloaded by the program and integrated into the game of another user. The world a player inhabits may be populated entirely by user created creatures. Whilst this does allow for a vast and varied game experience it also allows for the vandalism of game worlds through the creation of horrific or lewd monsters.

The Lewd: Spore's Online Graffiti

Like the online equivalent of a crudely graffitied penis on a toilet stall door the online Spore community landscape has become dotted with phallic monstrosities. Some user created body parts are aimed at the anatomically correct where as others aim for the cartoonishly crude. Others include horrific mutated/transformed body parts that are only revealed to players when they approach closely. All have the potential to be shared on Spore as there is no initial filtering of content due to the huge array of potential feature combination that can be used. Users can ban and remove creatures once they are noticed but the impact has already been made by this point.

Whilst why these are created is perhaps beyond the scope of this paper they are good demonstrations of horrific bodies (or body parts) being used almost as a weapon within an

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online community. Whilst not typically Protean in regards to changing the self-image of a user they are generally Protean in that they change the online landscape and interactions within it. The ability to introduce horrific body based creations leads to certain behaviours from other users; to avoid the virtual space, to retroactively police their virtual space, to endure the vandalism or to retaliate (using the user data attached to shared creatures). This pseudo-Protean effect is one that has the potential to cause behavioural ripples across a community rather than just within an individual's local virtual space.

The Horrific: Spore's Uncanny Valley

“But they *were* men. Men and women and children.’

‘No, they weren’t. Being shaped like us doesn’t make them men. Being a man is something else entirely.’ He scowled. [...]

Ellie shivered. ‘Phew!’ she exclaimed, ‘I’m glad they’re gone. I can stand the centaurs, a little, but those men...ugh!’

He shared her disgust; they looked less human close, having hair lines that started where their eyebrows should have been. They were so flat-headed that their ears stuck up above their skulls.”

[Heinlein - ‘Starman Jones’(1953), pp 164-66]

It has been noted that as artificial representations (virtual or physical) of humans approach realism whilst there is an initial increase in positive empathy towards the representation this hits a peak and then troughs just before the representation reaches full

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realism (Mori, 1970). The area of being almost, but not quite, human can cause feelings of discomfort and revulsion in an observer. This ‘Uncanny Valley’ effect is of particular interest in human-robot aesthetics but it is also of relevance with virtual avatar use as the theoretical underpinnings of the Uncanny Valley effect can apply to the virtual.

This can perhaps be seen as a subtle instance of body horror. Though the intention is to achieve realism the horrific is inadvertently achieved instead. Within Spore many user created attempts at replication the human form can be found (see Maxis, 2013 for a gallery of examples), and as a result many examples of Uncanny Valley horrors can be found. Just as the main concern within the field of human-robot aesthetics is how this sudden revulsion affects the interaction between the two the effect has the potential to change the online and in game experience.

The community user creations that potentially populate a game world not only serve as part of the visual backdrop to the game but also as a key part of the game mechanics. During one game stage players progress by either befriending or preying on the creatures around them. Preying on the creatures involves killing all instances of that creature within the proximity of the player. Though there are many other game elements that have the potential to influence player decisions on whether to prey on a creature a clear case can be made for the horrific evoked by a creation being paramount. This can be seen within the player shared narratives and experiences within the Spore Community. Just as physical characteristics can affect the reaction to an individual so should they be able to affect the reaction to user created content. In this sense the Spore created creature, released into the wilds of another user’s virtual world can be considered analogous to Frankenstein’s monster. As can the reaction of

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users to it, in driving it out of their immediate space, due to it being a perceived a grotesque mockery of the human form for falling into the Uncanny Valley.

Conclusion: Extending the Proteus Effect

The examples and narratives described within this paper do not map directly onto the Proteus effect as currently described within Psychological research. The examples are not quantitative or experimentally derived but they are useful and descriptive indicators of areas that are ripe for further experimental investigation as well as areas in which the Proteus effect theory could be adapted and extended beyond just physically determined self-perception. ‘The Sims’ provides a potential area of experimental investigation in the interaction between other user’s perceptions and the behaviour of the avatar holder. ‘Spore’ provides examples of how the Proteus effect could be extended to community or macro level rather than just the personal or micro. The authors strongly suggest that the information and rich narratives shared by members of online communities should serve as the inspiration and guide for relevant experimental investigation, as many such examples might be overlooked by mainstream research.

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References

- Baylor, A.L. (2011). The design of motivational agents and avatars. *Education Tech Research Dev.* 59:291-300.
- Berscheid, E., Dion, K., Walster, E., & Walster, G. W. (1971). Physical attractiveness and dating choice: A test of the matching hypothesis. *Journal of Experimental Social Psychology*, 7, 173-189.
- Castronova, E. (2004). The Price of Bodies: A hedonic pricing model of avatar attributes in a synthetic world. *KYKLOS*, 57, 173-196.
- Hatfield, E., Aronson, V., Abrahams, D., & Rottman, L. (1966). The importance of physical attractiveness in dating behavior. *Journal of Personality and Social Psychology*, 4, 508-516.
- Heinlein, R.A. (1973) *Starman Jones*. London: New English Library Ltd. (Original work published 1953)
- Jin, S.A. (2011). “My avatar behaves well and this feels right”: Ideal and ought selves in video gaming. *Social Behaviour and Personality*, 39(9), 1175 – 1182.

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Kolko, B.E. (1999). Representing bodies in virtual space: The rhetoric of avatar design. *The Information Society*. 15:177-186.

Lee, J. R. (2009). To Reveal or to cloak? Effects of identify salience on stereotype threat responses in avatar-represented group contrasts. *International Journal of Internet Science*. 4(1), 34-39.

Lee, S.W.S., & Schwarz, N. (2010). Wiping the Slate Clean: Psychological consequences of physical cleansing. *Current Directions in Psychological Science*, 20(5) 307–311.

Lewis, M. G. (1973). *The Monk; a romance*. Oxford: Oxford University Press. (Original work published 1796)

Maxis. (2013) Sporepedia. Retrieved from <http://www.spore.com/sporepedia>

Mori, M. (1970).The Uncanny Valley [Translated].*Energy*, 7(4), 33-35.

Paulson, R. (2007). *Sin and Evil: Moral Values in Literature*. New Haven: Yale University Press.

Rosenberg, S. W., Bohan, L., McCafferty, P., & Harris, K. (1986). The Image and the Vote: The effect of candidate presentation and voter preference. *American Journal of Political Science*, 30:108-127.

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EFFECT

Rosenberg, S.W., & McCafferty, P. (1987). The image and the vote: manipulating voters' preferences. *Public Opinion Quarterly*, 51(1):31–47.

Shelley, M. W. (1989). *Frankenstein: Or, the modern Prometheus*. London: Puffin Classics.
(Original work published 1818)

Smith, J.H. (2010). Trusting the Avatar. *Games and Culture*, 5:298.

Suh, K., Kim, H., & Suh, E.S. (2011). What if your avatar looks like you? Dual-congruity perspectives for avatar use. *MIS Quarterly*, 35 (3), 711-729.

Walster, E., Aronson, V., Abrahams, D., & Rottman, L. (1966). Importance of physical attractiveness in dating behavior. *Journal of Personality and Social Psychology*, 4, 508-516.

Wells, H. G. (2004). *The Invisible Man: A Grotesque Romance*. Project Gutenberg. (Original work published 1897)

Yee, N., & Bailenson, J. (2007). The Proteus Effect: The effect of transformed self-representation on behaviour. *Human Communication Research*, 33, 271-290.

Zhong, C.B., & Liljenquist, K. (2006). Washing away your sins: Threatened morality and physical cleansing. *Science*, 313, 1451–1452.

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Appendix

Appendix A: Part 1 of selected of Serial Sim Killer Thread from 4chan.org, archived and retrieved from forum.bodybuilding.com. Click to enlarge.



Appendix B: Part 2 of selected of Serial Sim Killer Thread from 4chan.org, archived and retrieved from [forum.bodybuilding.com](#). Click to enlarge.



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Appendix C: Part 3 of selected of Serial Sim Killer Thread from 4chan.org, archived and retrieved from forum.bodybuilding.com. Click to enlarge.

