

Perception and Reality in - and out - of *Second Life*: *Second Life* as a Tool for Philosophical Reflection and Instruction at the University of Southern Denmark

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1. EXECUTIVE SUMMARY

The presentation provides a demonstration and discussion of the ideas behind the prototype for the *Second Life* project entitled *Percipitopia* - an interactive portal in *Second Life* for philosophical education and research currently under development by Grund, Blok and Pilegaard (assisted by Jens Dam, Reference Librarian and E-learning Coordinator for SDUB, SDU's library.)

1.1 Background

Percipitopia takes as its point of departure a "virtual Whitehall" in which visitors are introduced to the Irish philosopher George Berkeley's thoughts, and from which further examination of philosophical issues and the history of philosophy is facilitated. The actual Whitehall was Berkeley's American home 1729-1731, and now functions as a museum for his life and work. Berkeley (1685-1753) is best known for his doctrine of *immaterialism*, the view that the objects of perception have no extra-mental existence, that reality consists solely of perceivers and perceptions. While Scholar in Residence at Whitehall in July 2007, Grund experienced first hand the positive influence which authenticity of setting exerted when teaching visitors about Berkeley and his philosophy. *Percipitopia* seeks to build upon that experience by experimenting with the notion of the teaching museum in a virtual context.

1.2 Considerations and Alternatives

Second Life is, as of this writing, the predominant metaverse, a first-generation phenomenon. The work being carried out by the authors is thus exploratory, providing insight and experience that may be transferred as the development within the design and implementation of online universes continues.

1.3 Conclusions

Second Life is created solely by its users. The visitor to *Percipitopia* is obliged to enter via an avatar. By juxtaposing features borrowed directly from the original Whitehall with novel features only available in a virtual environment, but inspired by aspects of the original one, the project explores and exemplifies the philosophical relationship between real and virtual in an educational context, as well as philosophical aspects of issues such as the relationship of user to avatar, relationships among avatars, the relationship of avatars to "their" world, to name only a few. Since this is done against the backdrop of Berkeley's work on philosophy, perception and vision, students are encouraged to develop philosophical skills by reflecting upon the ways in which it is relevant to *Second Life*, to the world as we otherwise experience it, to both - or to neither.

2. PERCIPITOPIA: THE PROJECT.

Percipitopia is a pilot prototype experiment the purpose of which is to investigate the ways in which the 3D interactivity of *Second Life*¹ may be employed in order to:

- 1) stimulate interest in philosophical reflection by exploiting the tension between the sensed familiarity of bodily placement in an environment via ones avatar and the displacement inherent in being present in a virtual setting;
- 2) awaken curiosity with regard to the history of philosophy and the history of ideas;
- 3) recontextualize the role of the museum or field trip as a learning tool;
- 4) rejuvenate existing educational materials by embedding them in a virtual context;
- 5) explore the contributions made by an aesthetically pleasing environment to the learning experience.

3. A SHORT SUMMARY OF BERKELEY'S PHILOSOPHY, ITS CONNECTIONS WITH PERCIPITOPIA AS AN E-LEARNING PROJECT, AND SOME PRACTICAL ASPECTS

3.1 A Short Summary of Berkeley's Philosophy

The name *Percipitopia* is inspired by Irish philosopher George Berkeley's (1685-1753) motto: *esse est percipere aut percipere: to be is to be perceived or to perceive* (Berkeley in Luce & Jessop, eds, 1948 Vol. 1, p.53). Berkeley is, indeed, best known for his doctrine of *immaterialism*, the view that the objects of perception have no extra-mental existence. A chief aim for Berkeley was to formulate a metaphysics² in which reality consists solely of minds and mental content, of perceivers and perceptions.

Berkeley's philosophy in a nutshell may be rather brutally summarized as follows: By proclaiming that *to be is to be perceived or to perceive*, Berkeley intended to put metaphysics on a common sense footing. He wanted to afford human beings the confidence that we need not feel alienated from the world to which we have access by means of our senses by having to accept that the ultimate substrate of reality is some unperceivable something with which we never can come into perceptual contact - e.g. matter, at least the matter of the philosophers. In metaphysics, matter is useful, since it provides a something onto which properties may be glued, stuff to underlie reality. Berkeley despised this way of regarding reality, feeling that it led to a form of subversive skepticism and ultimately to atheism. God played the role of metaphysical glue in Berkeley's metaphysics.³

3.2 The Connections between Berkeley's Concerns and *Percipitopia* as an E-learning Project

Berkeley's concerns are concerns which were related to philosophical issues being hotly debated during the Enlightenment. They were controversial then; they are controversial now. Why then use Berkeley as a jumping-off point for an experimental educational and research tool in the context of virtual reality today?

The answer is two-fold: Part of the answer lies in the sorts of issues on which Berkeley's philosophy requires reflection. To name a few:

- 1) If reality consists of perceivers and the perceived - and God is the glue which holds everything together and keeps it coordinated - how do we account for the nature of this God?
- 2) If - as Berkeley would have us accept - things are really ideas and thus not able to bump into each other or interact causally in any fashion, how do we account for the interconnectedness and regularity of nature?
- 3) How are sight, touch and the other senses related?
- 4) How do individual minds know each other and, indeed, themselves? How do they relate to the mind of God?

It should not be difficult to recognize that all of these questions are closely related to questions which are naturally posed with regard to *Second Life*:

- 1´) How should we conceptualize the role of the programmers and the underlying software when we try to gain an overarching perspective of the universe of *Second Life*, viz. its metaphysics?
- 2´) How is causality - the general relation of cause and effect - within the virtual environment simulated?
- 3´) When an avatar sees an object, how is this related to the distance at which the object is placed from the avatar? What does the contrast between avatar-centered vision and mouse-centered vision reveal to us?⁴
- 4´) How do avatars relate to each other *qua* avatars, and to what degree are our avatars *us*, and to what degree do they take on lives of their own?

As a university philosopher, Grund has been interested in questions 1´) - 4´) partially for their intrinsic interest, and partially with respect to the role they can play as bridge builders to classic questions within metaphysics and the history of philosophy. These are questions which many readers of science fiction and genre fiction - as well as viewers of cinematic and televised science fiction and genre fiction - have been asking themselves for years. It is as good as taken for granted nowadays within American and Western European educational contexts that students coming to university have not been prepared with respect to the traditional canon of philosophy and the history of ideas to any appreciable extent. Does this mean, however, that people coming to university have no basis whatsoever for engaging in reflection upon philosophical issues? Grund's experience teaching university philosophy suggests that exposure to the thought-provoking fiction of the above-mentioned kind is also a sort of propaedeutic for philosophical reflection and as a stimulus for engagement in traditional philosophical study.⁵

3.3 Some Practical Aspects

The remaining part of the answer is that Grund had the exceptional opportunity of acting as Scholar in Residence at Whitehall⁶ Berkeley's American home in Middletown, Rhode Island 1729-1731⁷ during July of 2007. While savoring the experience of staying in this museum house and acting as a guide for knowledge tourists, both with respect to Berkeley's Colonial environment and to his philosophy, it became evident to Grund that there was, indeed, something special about being able to immerse oneself in the intellectual universe of this philosopher within the surroundings provided by the museum house.

Grund had already been funded by SDU in order to join forces with the IT- and E-learning sections for research and development during the fall of 2007. *Second Life* had become the venue for a virtual SDU-campus in 2006 under the leadership of IT-Services Director Hans Kruse Christiansen. In fact, SDU was the first European university to open a digital campus in *Second Life*. After some work together with E-learn Project Coordinator Rasmus Blok, Christiansen, and IT-Consultant Jørn Wennerstrøm, it was quite natural to seek some additional funding from SDU to pave the way for launching the *Percipitopia* Project, with the objectives as outlined in the above. SDU Research Librarian and Library E-learning Coordinator Jens Dam offered his assistance with the project. Finally, experienced *Second Life* Developer and SDU student Jesper Pilegaard came on board, and the project has been off the drawing board since March of 2008. Grund returns as Scholar in Residence at Whitehall during July 2008 and looks forward to more opportunities for gathering material for *Percipitopia*.

4. IMPLEMENTATION

4.1 Design considerations

The first phase of the project was to rebuild the virtual campus of SDU from the virtual ground up, since Pilegaard and Grund both had some visions regarding some sort of connection between *Percipitopia* and the virtual campus of SDU. During 2007, virtual habitation and use of the original SDU-campus from 2006 had yielded quite a bit of practical experience which pointed to the need for remodeling. This exemplifies a point which cannot be emphasized strongly enough at this stage

in the development of open access 3D environments such as *Second Life*: acquiring know-how and skill in a virtual environment requires that those who wish to develop it actually spend time there and learn by doing. Being in *Second Life* is an immersive experience, which - although *Second Life* itself is a simulation - cannot be simulated. The new campus which has now been constructed reflects this accumulated experience: a visitor will note that it is very easy to find ones way around, venues are clearly marked, and there are entry possibilities through the roof; one must not forget that flying is one of the preferred means of human locomotion in 3D virtual reality!

A crucial, related point is that although the detailed knowledge of functionalities within *Second Life* may become obsolete with the eventual development of other open access platforms for virtual reality, the know-how and experience regarding virtual "existence" will not. This will have to be acquired at some point in the career of anyone wishing to gain expertise in virtual reality design. (The analogies with other historical phases in the development information technologies are obvious; one only needs to reflect upon how many of us over forty years of age cut our IT-teeth on Atari or Commodore computers, neither of which survived the selection process of IT-evolution, but which prepared us well for things to come. . .).

As was the case with the "old" virtual SDU, close attention to aesthetic and design features yields a complex which - although it is not in any way a copy of the first-life version of SDU - is clearly recognizable as a complex which is a close relative of the first-life version of SDU in Odense. The following five snapshots (Images 1 - 5) from first life and *Second Life* illustrate this point.



Image 1: SDU's virtual campus in *Second Life* - SDU-SL - May 15, 2008. (Photo: C. M. Grund)



Image 2: SDU-SL's previous campus during the spring of 2007. (Photo: H. K. Christiansen)



Image 3: SDU's campus in Odense May 13, 2008. (Photo: Cynthia M. Grund)



Image 4: Interior shot, SDU-SL May 12, 2008. (Photo: C. M. Grund)

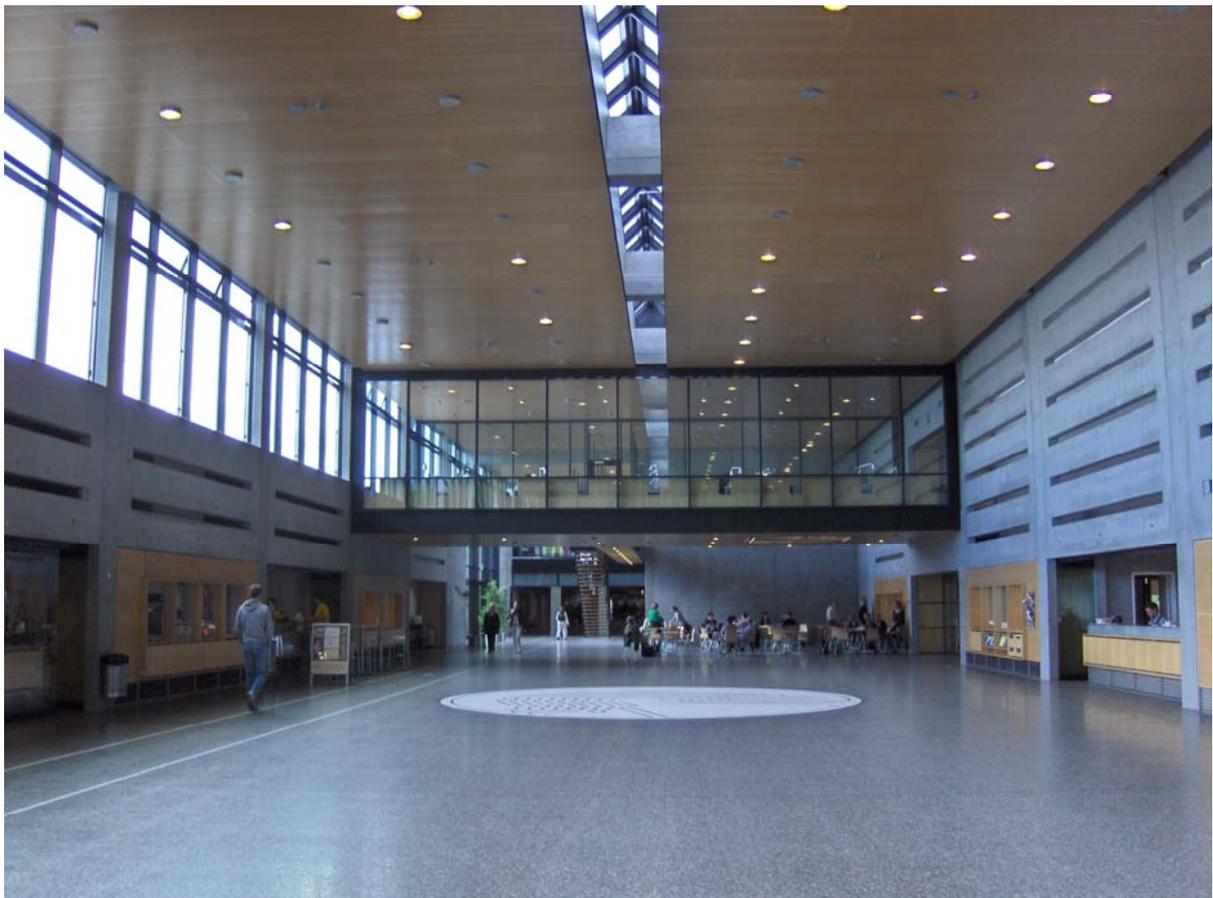


Image 5: Interior shot, SDU-Odense May 12, 2008. (Photo: C. M. Grund)

An idea which has been brought to fruition is that of providing a physical connection between *Percipitopia* and SDU (Image 6). This has proven to be effective on many levels. There is a pleasing juxtaposition of SDU-*SL*'s Italian Brutalist-influenced architecture with the serene Colonial architecture exemplified by Berkeley's Whitehall, with its marked Palladian-style entryway. There is also a sort of homage to the prominent elevated passageways which are part of the construction of SDU in Odense (Image 7). The elevation of Whitehall onto a platform connected by a bridge with SDU allows for an evocation of the carriage drive (Images 8 & 9) which is the manner of approaching the first-life version of Whitehall. In addition - as in the real world - one cannot predict how future building on the island on which these buildings are situated will progress; the elevation of Whitehall almost makes it immune to whatever kinds of construction may take place in its environs as time goes by. Last but not least, the connection of the two buildings provides a natural meandering path from *SL*-Whitehall to the proposed site of *Hanging Rock* on the shore on the other side of the island. This path bears a somewhat truncated iconic resemblance to the path one is obliged to take from the real Whitehall to the real Hanging Rock in Middletown, Rhode Island. The detour through SDU-*SL* affords possibilities for the visitor to Whitehall to see what is going on at SDU-*SL* while on her way to the *SL*-Hanging Rock (Images 10 & 11). The real Hanging Rock was a significant location for Berkeley during his sojourn in the Colonies, and he is said to have written his book *Alciphron, or The Minute Philosopher* while sitting in its shadow.



Image 6: Perspective showing the manner in which SDU-*SL* and *Percipitopia* are connected, May 11, 2008. (Photo: J. Pilegaard)



Image 7: Perspective showing elevated passageway at SDU-Odense, May 13, 2008. (Photo: C. M. Grund)



Image 8: The entrance to Whitehall in Middletown, Rhode Island, USA, July 22, 2007. (Photo: C. M. Grund)



Image 9: The entrance to SL-Whitehall, May 12, 2008. (Photo: J. Pilegaard)

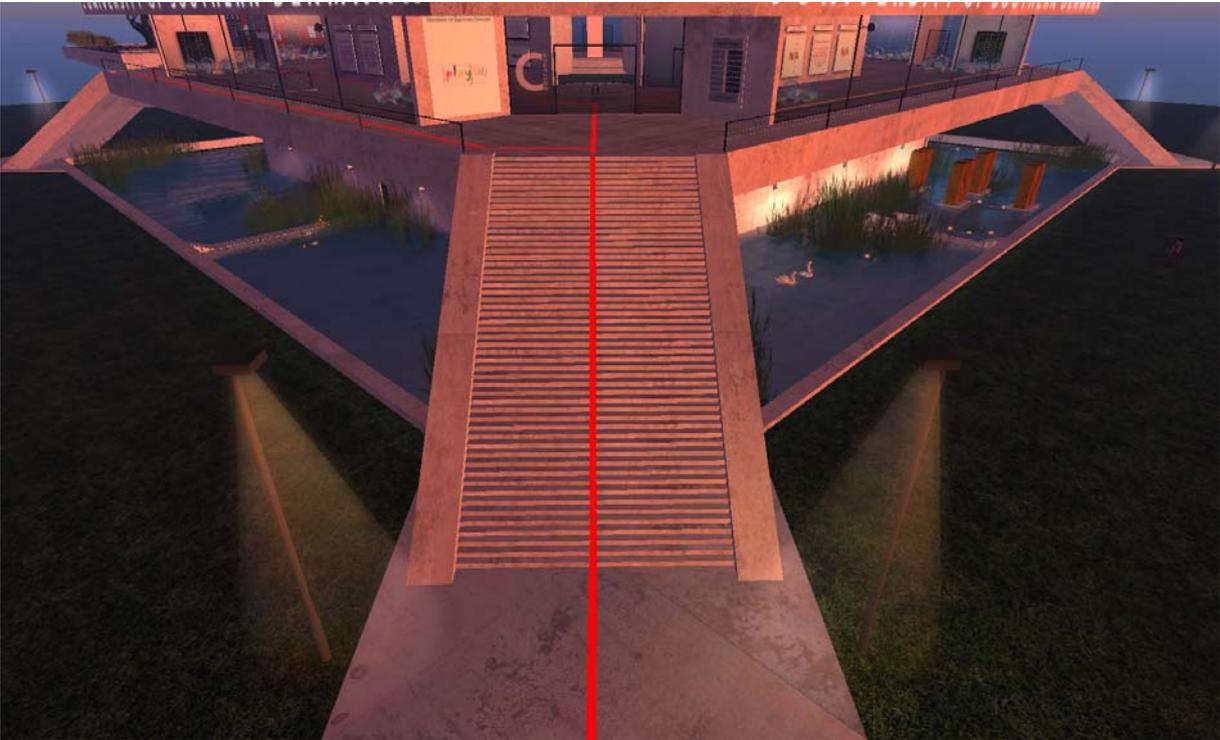


Image 10: The path to SL-Hanging Rock, May 12, 2008 (just follow the red line. . .). (Photo: J. Pilegaard)



Image 11: The path to *SL*-Hanging Rock, May 12, 2008 (just follow the red line. . .). (Photo: J. Pilegaard)

4.2 Beyond the Dollhouse: Providing a Unique Educational Environment

The purpose of the *Percipitopia* project has not been that of building a better dollhouse. Let us turn our attention to the goals 3) - 5) in Section 2. One goal of our project has been to recontextualize the role of the museum or field trip as a learning tool. As was mentioned in 3.3 above, Grund was quite taken with the manner in which showing knowledge tourists around the real Whitehall seemed to reinforce the communication and reception of philosophical theorizing as well as to stimulate questioning on the part of the guests. Recreating this kind of ambience is, of course, a subtle enterprise, and a major part of the task is to reinterpret the ambience in a virtual environment.

A case in point was the lovely flower and herb garden adjacent to the real Whitehall, which is also modeled in *Second Life*. Time spent in the garden with knowledge tourists who had sought Whitehall out as a destination on a lovely summer afternoon inspired reflection on Grund's part as to the content of her lecturing on things philosophical, historical and cultural. Detailed questioning about the reasons for such an herb garden could lead to interesting reflection on the times during which Berkeley and his family stayed at Whitehall. Given the current state of 3D design tools and the technical limitations on number and sizes of objects, it is as good as impossible to faithfully reproduce a 3D herb garden. We therefore hit upon the following compromise: A large cedar-shingled billboard stands on the lawn to the right of the door to Whitehall en route to the herb garden. On it are projected over 50 self-advancing slides with labeled close-ups of the plants from the real herb garden at Whitehall. This way, the educational accuracy of the garden experience is preserved, while the 3D ambience is recreated to the degree which is currently permitted (Image 12).



Image 12: Cedar shingle billboard on the premises of Whitehall *SL*, May 15, 2008, showing garden close-ups from Whitehall in Middletown, Rhode Island. (Photo: J. Pilegaard)

The cedar-shingled billboard proved to be useful in another capacity: on its other side are projected 16 self-advancing slides which constitute the 16 pages of a young person's guide composed in 2004 by Whitehall guest Dr. Julia D. Ipgrave from the UK (Ipgrave, 2004). The guide is truly noteworthy in the concise manner in which it stimulates the reader to reflect over the interior and exterior of the house, the garden, and philosophical and historical aspects of Berkeley's thinking and life, all in a very low-tech manner (Image 13). We have used it as a sort of thematic guiding light. We are working on ways of incorporating the philosophical questions which it poses, and are using the level at which it is pitched as a standard for the level at which we are aiming our current educational projects. We have also not been able to resist remarking, that it is rather interesting to observe, that in 2004 the most readily available possibility and economically feasible method for creating educational material about Whitehall was the production of a two-color book, which only was entirely useful for youngsters who were privileged enough to visit the real Whitehall; four years later at least some part of the field trip experience itself can be created in the medium of a virtual reality such as *Second Life*.

That is where the enterprise already has superseded the doll house stage. There are, however, more challenges in the wings.



Image 13: Cedar shingle billboard on the premises of Whitehall SL, May 15, 2008, showing garden with billboard exhibiting pages from *Welcome to Whitehall: George and Anne Berkeley's Colonial Home 1729-31. A Young Person's Guide* Dr. Julia D. Ipgrave. (Photo: J. Pilegaard)

5. PLANS FOR FUTURE DEVELOPMENT, CHALLENGES TO BE FACED AND CONCLUSION

The challenge which we now are facing is how to more fully exploit the medium of a metaverse such as *Second Life* to raise the bar with regard to interactive teaching methods. One aspect on which we are working is how to use the interior of the house most effectively. Solutions now on the drawing board and soon to be tried out include the use of the interior of the house to illustrate some of Berkeley's points about the nature of vision; certain features of *Second Life* allow for recreating situations which could provide avatars, who are knowledge tourists in *Second Life*, with experiences that underscore some of Berkeley's observations about vision. Since this involves a creative use of the interior, we will have to do some more experimenting to figure out how to combine this with the ambience-creating effect that inclusion of normal inventory otherwise would provide. A step in this direction has been the design of the windows on the house, so that when one looks into each window from the outside, a view of the real Whitehall is afforded.

Perhaps the biggest challenge is one which faces all introduction and employment of new e-learning materials: the challenge of getting people to use them. On a high level, one could hope that a project such as *Percipitopia* might inspire students to build their own models of reality within the virtual world, so as thereby to be confronted with decisions involving much that they otherwise might take for granted about the nature of the real world: The process of deciding what aspects to keep and what aspects to discard reveals what the model builder takes as being salient or important in the original world.

On a more prosaic level, there seem still to be obstacles attendant to matters such as lack of sufficiently powerful graphic cards on many existing machines within university environments; policies regarding administrator rights on various levels, so that a vast majority of university employees cannot carry out the routine updates which something of the scope of *Second Life* naturally requires; and then there is the matter of mustering the courage to cast oneself into an alternative reality which is evolving according to its own rules.

No matter what, it is all too exciting to ignore.

6. NOTES

¹ *Second Life* is with increasing frequency referred to as a *metaverse*. This is done in order to distinguish it from games, such as *World of Warcraft* which, arguably create their own universes which are populated by avatars. On the basis of the total amount of hours used by *Second Life*-inhabitants in *Second Life* per month, it may be calculated that - on the average - there are always a little less than 40,000 inhabitants online in *Second Life*. Pilegaard calculates as follows: 28 million hours/31 days/24 hours yields ca. 40,000. Pilegaard adds that the primary users of *Second Life* are Americans, Europeans and Japanese. For more statistics, see http://secondlife.com/whatis/economy_stats.php.

² **Metaphysics** deals with the **ultimate nature** of reality. Questions as to "what there is" - whose ultimate nature then may be discussed - are often regarded as being the subject area of **ontology**. One has to be careful: in many philosophical contexts, these two terms are used interchangeably.

³ The reader who would enjoy making a far more in-depth acquaintance with Berkeley's thought is referred to Fraser, 1901/2205; Grayling, 1986; Houghton, 1985; International Berkeley Society, <http://georgeberkeley.tamu.edu/>; Luce, 1947; Luce and Jessop 1948-1951; The Works of George Berkeley (1685-1753): Online Texts at Trinity College, Dublin; see links in References below; School of Mathematics and Statistics, University of St Andrews, Scotland - link below; and Tipton, 1974.

⁴ Berkeley's theories of vision were widely known and respected. Connecting them with popular culture is not a new phenomenon: "[Swift] probably read Berkeley's Essay on Vision, and may have taken from it the notion of the relativity of size which appears in Gulliver's Travels" (Luce, 1949, p. 65).

⁵ Since joining the faculty of the Philosophy Department at SDU in the spring of 1999, Grund has taught courses entitled *Science Fiction And Philosophy* (Spring 2001), *Horror and Philosophy* (Spring 2002), *A Philosophical Examination Of The Themes Of Death And Immortality in Selected Works Of Science Fiction, Horror And Weird Fiction* Philosophy (Fall 2004), *Philosophy and American Television* (Spring 2005), *Philosophy and American Television: Who Am I?*, (Fall 2005). In addition a wide selection of thematically related lectures at venues other than SDU, a conference dealing with current research in Philosophy and Popular Culture has been held every year in November since 2005.

⁶ "The name 'Whitehall' was not chosen to honor the British government or in memory of the royal palace which dated from the time of Henry VIII (who took over 'York Palace' from Cardinal Wolsey and renamed it) and went up in the flames of the great fire of 1698. Almost certainly, Berkeley chose that appellation in honor of the 'Chapel Royal, Whitehall' presided over at that time by his good friend Edmund Gibson, bishop of London. Gibson was automatically dean of the chapel and may even have had a small apartment there, since Fulham was thought of as way out in the country. (Gaustad, 1979, in n. 28, pp. 15-16).

⁷ The National Society of the Colonial Dames of America (<http://www.nscda.org>) have responsibility for the upkeep of Whitehall. On <http://whitehallmuseumhouse.org/history.html> we read:

In 1897 three concerned women secured "ownership" of Whitehall. They raised the money to restore it. In 1898 weatherproofing took place: roof and windows were replaced. This restoration was one of the first on Aquidneck Island. The property was then given to The National Society of The Colonial Dames of America in the state of Rhode Island. The Dames first opened Whitehall to the public on Flag Day, June 14, 1900.

The museum house has been faithfully cared for through the years. Original furnishings were all gone so the Dames worked to obtain furniture that would have been suitable for the period of the Berkeleys residence circa 1730.

In 1974 The Colonial Dames obtained full title to the property from Yale. They bought the 999 year lease.

For more on Whitehall in a local context, see Herschbach, 2007.

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Texts by George Berkeley

[An Essay towards a New Theory of Vision](#)

[A Treatise concerning the Principles of Human Knowledge](#)

[Three Dialogues between Hylas and Philonous](#)

[The Analyst](#)

[A Defence of Free-Thinking in Mathematics](#)

[Reasons for not replying to Mr. Walton's Full Answer](#)

Related Works

[An Account of the Life of George Berkeley, D.D., Late Bishop of Cloyne in Ireland](#) by Joseph Stock (1776).

[The Analyst Controversy](#)

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Second Life. University of Southern Denmark - Percipitopia. Visit on May 15, 2008. www.secondlife.com (Free software download and creation of avatar required.) <http://slurl.com/secondlife/Bifrost/89/128/33>.

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Whitehall Museum House, Middletown, Rhode Island <http://whitehallmuseumhouse.org/>.