

## Best Practice Forum 235: Virtual Worlds and Public Diplomacy in the Digital Age

### Department of Business, Innovation, and Skills, UK Government

#### Summary

This workshop provided an introduction to Virtual Worlds (that is, online multiuser environments) and their relationship with the practice of Public Diplomacy.

Virtual Worlds were invented in 1979 in the UK though it is only in the last few years (with the rise of *Second Life*, *Habbo Hotel* and *World of Warcraft*) that they have come to wide public attention. Virtual Worlds are used all over the globe for entertainment and ‘serious’ purposes by people of all ages and a wide range of socio-economic groups. The industry is now worth several billion US dollars per annum and there are approaching one billion active users of virtual worlds.

While Public Diplomacy was once seen as State-to-State action conducted face-to-face in the modern world, it has expanded to be highly mediated and to involve the general public to a much larger degree.

Virtual Worlds are used for a range of applications including entertainment, commercial applications, and research. Increasingly, Virtual Worlds are also being used by third sector and public organizations.

Governments are increasingly using technology to interact with each other and citizens. Web 1.0 is now a standard government platform for information dissemination and transactions. Web 2.0 is being increasingly adopted. Virtual Worlds, sometimes termed Web 3.0 (because they are often 3 dimensional), can be seen as an extension of this pattern of use - one which some governments are already embracing.

There is a wide range of examples of uses of Virtual Worlds in the public sphere. Uthango Social Investments have created a ground-up project in South Africa to widen public understanding of issues and a similar project sell virtual bicycles to raise funds to provide physical ones. *DiploFoundation* have created a Virtual Embassy in *Second Life*. President Obama’s trip to Ghana employed integrated virtual events in *Second Life* and *Metaplace*. *Microsoft* and *FutureLab* are working on new interfaces and virtual environments that provide equal access to expressive technology for people irrespective of their level of physical ability. The UK’s National Health Service used a virtual simulation of a new healthcare provision together with YouTube and in-world meetings as part of its public consultation.

Lastly, the workshop touched on the potential role of Virtual Worlds in policy formation, both as policy laboratories and as loci for litmus tests for once-separate areas of policy that are increasingly brought together in the regulation of virtual spaces.

#### INTRODUCTION

*Dr. Sue Baxter*, Deputy Director, EU and International Competitiveness Unit, Department of Business, Innovation, and Skills (BIS) (UK), introduced the workshop on behalf of the UK government. Outlining UK government proposed the IGF’s first workshop dedicated to the topic of Virtual Worlds, Dr. Baxter noted that, “BIS sees huge potential in the serious application of Virtual Worlds for a new way of engaging with ordinary citizens, which will bring government much closer to the people”.

*Mr. Ren Reynolds*, founder of the Virtual Policy Network (tVPN) think tank, introduced the speakers and provided participants with a brief overview of Virtual Worlds. Mr. Reynolds explained that Virtual Worlds can be described as online spaces where people can get together and share an experience. While there is still some debate as to what exactly constitutes a Virtual World, from a formal point of view, Virtual Worlds are generally agreed to share the following characteristics outlined by Professor Richard Bartle (generally acknowledged as the co-inventor of virtual worlds) in his book *Designing Virtual Worlds*. Under the Bartle definition:

- Virtual Worlds are shared and persistent;
- Interactions occur in real-time;
- There is an underlying automated rule set, the ‘physics’ that determines how individuals effect changes; and
- Individuals are represented within the world.

Under this definition Mr. Reynolds suggested that web pages, and by extension social media such as Facebook, are not Virtual Worlds though there are an increasing number of web-based casual spaces that do fall within the definition.

Mr. Reynolds went on to explain that Virtual Worlds could be broadly categorized by the ostensible purpose for which they were designed. That is, Virtual Worlds can be seen as falling into the following types:

- Game Worlds (also known as Massively Multi-player Online Role Play Games – MMOs or MMORGs), e.g. *World of Warcraft*, *Lord of the Rings Online*;
- Social Worlds, e.g. *Second Life*, *There.com*; and
- A category that has yet to find a generally agreed label but could be termed Business Worlds.

Mr. Reynolds also noted that in looking across these categories and focusing on user type, the largest growth market for the Virtual Worlds industry is in the child-focused sector. However, there has been a massive uptake of Virtual World use in education, and with the launch of an enterprise-focused product by Linden Lab (makers of *Second Life*) we may expect a growth in this area of the market, especially with the pressure on businesses to cut costs and carbon emissions – something which may prompt the adoption of virtual meetings.

Providing some further facts and figures about Virtual Worlds, Mr. Reynolds noted that whilst recently popular, Virtual Words are not a new technology. Being invented

in 1979 at the University of Essex in the UK, Virtual Worlds are about 10 years older than the World Wide Web. Today Virtual Worlds are developed and used all over the world. Estimates of the total numbers of Virtual Worlds users vary but are generally in the hundreds of millions and are growing towards one billion users; a single Virtual World, *Habbo Hotel*, has had 150 million user registrations. In terms of revenues, *World of Warcraft* alone is estimated to net over \$1bn per annum, and the Virtual World and online game industry in China is estimated to have revenues of \$3.5bn per annum.

The primary and overwhelming use of Virtual Worlds is Entertainment – with Virtual Worlds targeted at children being the fastest growing sectors. However, Virtual Worlds also have many other uses as the rest of the workshop will demonstrate. Education and Training are the fastest growing of these – with the vast majority of UK Higher Education institutions now having some Virtual World presence, a trend that other countries are emulating.

Virtual Worlds are also providing sites for innovation in commerce and business practice – virtual meetings and other sustainable practice both cut costs and help the environment. This is a trend that is set to increase in 2010 as Linden Lab, makers of *Second Life*, offer a dedicated corporate product, and the competing Open Source solution *OpenSim* creates a competitive market in the corporate sphere.

Mr. Reynolds closed the introduction to Virtual Worlds by noting that they are interesting from a policy perspective by borrowing a term from the academic Henry Jenkins of MIT that they are the most ‘convergent media’ that we have. That is, not only do Virtual Worlds bring together all media forms into a single media artifact (i.e. broadcast sound, vision, film, animation, communications, etc.) but they also raise issues such as the nature of virtual property, intellectual property, co-creation, and taxation. As such, Virtual Worlds are also increasingly used in science to examine things such as economic impacts of change. Thus Virtual Worlds provide an opportunity for policy makers to research policy impacts through using them as policy laboratories. They also provide a policy litmus test as they are sites where the disparate policies come together in a single artifact and so provide valuable case studies in coherence of once disconnected areas of policy and law.

Mr. Reynolds also introduced the theme of public diplomacy, noting that the term is traditionally used to denote state-to-state acts. However over recent years the term has expanded as State action modified. Thus in the context of this workshop, public diplomacy is used to denote State actions to further policy ends, directed at either other states or individuals primarily in external states but potentially also with domestic populations.

Mr. Reynolds noted examples of the combination of Virtual Worlds and public diplomacy include the work done by the US State Department, such as the Second Life Jazz festival, and the recent trip by President Obama to Ghana which employed multiple online and virtual channels to augment the event – these included events in *Metaplace* and *Second Life* [<http://www.youtube.com/user/draxtordespres#p/f/2/p8Crk9rxDc>], and integration with bloggers and Twitter. Also noted were the increased use of Virtual Worlds to communicate directly with sectors of the public that may be hard to reach or about

topics that may be problematic examples here include the UK Government’s use of the kids Virtual World *Habbo Hotel* as part of the FRANK drugs education campaign.

*Dr. Jovan Kurbalija* of DiploFoundation provided an overview of the changing relationship between diplomacy and technology.

In his talk entitled ‘Cyber Public Diplomacy’ Dr. Kurbalija noted that diplomacy involves communication, consensus, and compromise; and with each step-change in technology there are fears that diplomacy is either no longer necessary or no longer possible. However, while technology brings changes to the methods of diplomacy the need for the essentials persist. Expanding on this theme it was noted that while technology may bring disintermediation and there may be new intermediaries in the globalised world, there is still a need (indeed, perhaps a greater need) for personal professional intermediation.

Looking historically, Dr. Kurbalija suggested that the ‘Golden Age’ of diplomacy was between the Vienna Congress in 1814 and the First World War in 1914. This period saw no major global conflicts and the establishment of modern diplomatic services. It also saw the invention of technologies such as the telegraph, telephone, radio, and wireless communication. These technologies represented a paradigm shift as communication was freed from transportation in a way it had not been before. Since that time we have seen an evolution of technology and diplomacy.

In the modern age we have a globalized world and pervasive information technology, which present new challenges. A key term here is disintermediation – this has occurred in commerce and also in diplomacy where states and individuals can now communicate directly and easily. Dr. Kurbalija argued that this does not negate the role of diplomacy; rather it modifies it. This is because diplomacy is still needed in cases such as potential conflicts of interest. However diplomacy must now also take into account the greater role of public participation in many processes that were once closed off and opaque. What’s more, the Internet is now itself a site for diplomacy, both as a medium and as an artefact and set of processes that require governance.

Looking at the application of technology, Dr. Kurbalija noted that artefacts such as telegrams have been pivotal to diplomatic relations over the years. Thus it is consistent that more contemporary technologies would play their part. Websites and email are now day-to-day tools of diplomacy that are not given a second thought. Web 2.0 tools are also now increasing in use by state actors.

Turning to Virtual Worlds, Dr. Kurbalija highlighted the work done by the University of Southern California with Democracy Island and Diplo’s own work on the Virtual Embassy of Maldives, as well as other virtually mediated activities. This work included an experiment in multilateral negotiations (February – March 2009) that produced the following lessons learned:

- Lack of emotional facet (both advantage and disadvantage)
- Need to structure dynamics of negotiations
- Challenge for the hierarchy in diplomatic services (junior diplomats are usually the most active ones)

In summary, diplomacy and Virtual Worlds will have a future but like all technology, we have to understand the right role for the right tool and ensure that people are training in the practices that relate to the technologies which they are employing.

*Dr. Nagwa El Gazzar* - Professor of Communication, Misr International University, presented to the workshop her work on virtual marketing among youth in Egypt. Dr. Gazzar defined virtual marketing as “a simulation of a real or physical experience, which occurs within a computer-mediated environment, located between direct (i.e. product trial) and indirect (i.e. traditional advertising) experience along the spectrum of consumer learning”. It was noted that virtual marketing is part of a wider spectrum of direct marketing, and has evolved from e-commerce all the way to the introduction of new products in Virtual Worlds such as *Second Life*.

In terms of overall growth and usage it was explained that in Egypt the adoption of the Internet has grown quickly, with the number of users increased to 13 million by Q1 2009 in comparison with 9.84 million in 2006. What's more, use of the Internet by government has increased, with 34% of Egyptian government entities using the internet, 78% of these having already had a website or web presence by June 2008.

Dr. Gazzar suggested that with the rapid uptake of the Internet, especially by youth, the Egyptian government should look to develop this channel of communication. What's more, it was noted that the government should support greater trust in the Internet, in particular the security of online financial transactions.

*Professor Lizbeth Goodman* - Research Director, Futurelab, and *Mr. Michael Thatcher* - Regional Technology Officer, Microsoft Middle East & Africa – talked about a range of projects that use various types of technology to enhance the lives of people such as those in the developing world and those with severe disabilities. Mr Thatcher stressed the importance of private-public sector collaboration especially in education projects in the developing world. A key program in this area is Strengthening Learning in Science, Technology, Engineering and Mathematics STEM which provides computing resources, utilizes data as a strategic asset, and employs online simulations [see: <http://www.microsoft.com/about/corporatecitizenship/en-us/our-focus/addressing-societal-challenges/> for further details].

Professor Goodman highlighted the Inter-FACES project, co-directed by Professor Goodman with Dr. Mick Donegan. This project employed eye-tracking technologies for Assistive Technology and user empowerment together with bio-affective feedback triggers for movement and 'control' in Virtual Worlds and game environments (including learning environments).

As well as collaborating with Microsoft on advances in user interfaces, these projects employ Virtual Worlds such as *OLIVE* to represent users and provide new spaces in which they might create and interact. Professor Goodman also noted that Virtual Worlds are places that offer unique opportunities, as they can provide equal access to creative tools for people of all abilities. Moreover, they can be spaces where people collaborate irrespective of age or other social factors.

*Ms. Dorette Steenkamp*, Executive Director, Uthango Social Investments / metaAfrica, gave a presentation entitled “The Rise of Virtual Worlds – possible value of 3D environments for Africa.” Ms. Steenkamp explained that Uthango works both on the ground with communities in South Africa, and with public and private sector partners.

Uthango's metaAfrica project has used a range of Internet resources (such as participative platforms including *Facebook* and *Second Life*) to enable indigenous knowledge creation and collaborative change creation. Using *Second Life*, the metaAfrica project has enabled Uthango to advocate development aims for Africa and address “information poverty”.

In the field of Education, Uthango has worked on *Second Life* projects in conjunction with Kingston University (UK) and Delaware College (US). Uthango also worked jointly with University of Southern California's Centre for Public Diplomacy supporting the *Second Life* elements of President Obama's visit to Ghana in 2009.

In the area of business collaboration Uthango has worked with *Shaspa*, *IBM*, and Philips on an environmental/sensor technology exhibition. Uthango is also running the [e]bizikele project in conjunction with *Hippo Technologies* and *RDV Animation*. In this project virtual bicycles are sold in *Second Life* and the proceeds are used to buy physical bicycles that are to be donated to South African communities.

*Second Life* was also used to hold a design competition and evaluate models for a physical development in South Africa, an annual Africa Day in conjunction with Orange Telecom (France), and Mandela Day held in Virtual Africa within *Second Life*.

In summary, Uthango are using the Virtual World *Second Life* together with a range of other technologies to build a bridge of understanding and create change at grass roots level in South Africa.

*Mr. Dave Taylor*, Program Lead, Virtual Worlds, Faculty of Medicine, Imperial College London (UK), talked about the use of Virtual Worlds in public policy consultation, events for medical professionals, and touched on in-world governance of virtual spaces.

The prime example of public diplomacy using virtual worlds presented by Mr. Taylor was *Second Health*. The *Second Health* project was a public consultation that involved building a prototype of future health provision as part of the public engagement strategy pioneered by Lord Darzi (the then-Parliamentary Under-secretary at the UK's Department of Health). The prototype is still available for people to interact with in the National Health Service area of *Second Life*. In addition to this interactive model of healthcare, provision the virtual clinic was used to create patient journey videos, which were in turn put on YouTube. *Second Life* was also used for public consultation, employing its voice and text communication facilities.

In addition to conducting this project and using its outcomes as part of the public policy debate, the team has gathered research data about the comparative of different communications techniques including Virtual Worlds through this they have been able to quantify positive outcomes of the use of virtual technology.

The Imperial College London Faculty of Medicine's use of Virtual Worlds also includes:

- Translational Research
- Events
- Communities
- Movies
- Software Engineering
- Simulations – Scenarios
- Shared low-cost data visualisation

The objectives of these projects include:

- Provide evidence base for clinical adoption of technologies
- Inter-disciplinary knowledge sharing, collaboration and innovation
- Patient Information and Safety
- Design Innovation
- Professional Training
- Research into Healthcare Policy and Public Engagement
- Provide Future Healthcare Services

Mr. Taylor noted that one great advantage of Virtual Worlds is that they provide spaces where professionals, academics, and the public can mix and have conversations which may not be possible in other fora. However there is a division between *Second Life* and *Teen Second Life* (an area for 13 to 18 year olds). This does prevent conversation across these age groups and creates additional effort in moving virtual objects from one system to the other.

The value of using *Second Life* for health applications in particular, Mr. Taylor explained, is that it already has over 150 condition-based groups such as: Dementia, Endometriosis, Irritable Bowel Symptom, Muscular Dystrophy, and Spina Bifida. Also there are 500+ patient groups and there are health professionals.

Professional events such as the International Virtual Association of Surgeons and the UK National Health Service Managers have been held in or streamed into *Second Life*. At the same time, journals such as the British Medical Journal have been debating whether it is necessary to physically travel to conferences. Also, virtual participants have been able to come in and out of meetings at the times that suited them.

*Second Life* has also been used for medical student training. Here, things like immersive simulations of vocal chords can be created to help visualise conditions such as speech disorders. Mr. Taylor gave the example of noted a publicly accessible class which served to encourage users of *Second Life* to talk directly to the academics – in one case leading to an individual seeking professional help for their speech disorder for the time in their life. Simulations also include full operating theatre scenarios and medical emergencies.

Lastly, Mr. Taylor explained that the *Second Life* 'islands' used by the faculty are part of an area in *Second Life* known as SciLands – science and technology islands in *Second Life* (<http://www.scilands.org/>). SciLands is an area run by a community of organizations interested in science education. The community has its own constitution, and uses democratic processes to determine things such as placement of areas within the *Second Life* land mass. Organizations that are a part of SciLands include: *BIS (Future Focus); Nanotechnology (NPL), NASA, NOAA, CSIRO; National Institutes of Health; Imperial College London; JPL, National Space Society; Mars Institute, Space Studies Institute; Caltech, EPA, DOE; Memorial Sloan-Kettering Cancer Center; Princeton Institute of Advanced; University of Texas at San Antonio and North Michigan University.*

The workshop closed with a short Question and Answer session lead by *Mr Ian Taylor MP*. This concluded with a summary of some of the key challenges and opportunities for virtual worlds and public policy as follows:

Key challenges:

- Virtual Worlds are still viewed by many policy makers as a minority entertainment form this underestimates both the scale and breadth of their use.
- Virtual Worlds challenge policy makers as they are difficult to categorise
  - In terms of use they are an entertainment form, but also are used in commerce, science and education.
  - Virtual worlds combine many media forms which are typically governed by separate laws, regulatory frameworks and governance bodies
  - Virtual Worlds also tend to be global in respect of their development, hosting and use – this gives rise to a wealth of inter-jurisdictional issues

Key opportunities:

- Virtual Worlds present a range of opportunities which have both direct beneficial outcomes and tend to have positive environmental impacts, these include:
  - Public engagement e.g. drug and sexual health awareness
  - Learning & teaching e.g. hands on / creative learning
  - Collaboration e.g. virtual meeting
  - Science e.g. virtual laboratories
- For policy makers Virtual Worlds provide an ideal test case where intersecting policies can be examined in a practical context

- end -