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Published in:
Handbook of research on socio-technical design and social networking systems

Publication date:
2009

Document Version
Publisher's PDF, also known as Version of record

Link to publication in Tilburg University Research Portal

Chapter IX
Privacy Regulation in the Metaverse[1]

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ABSTRACT

Second Life can be seen as a social microcosmos in which fairly normal people lead a social life and where social needs develop. Privacy is one of those needs. It is a need that is seemingly at odds with the key characteristics of Second Life: social interaction, transparency and openness. This chapter sketches the state of privacy in Second Life and how privacy is regulated in and around Second Life. It argues that the current governance model in Second Life is inadequate to provide proper privacy protection. The chapter concludes by briefly discussing current developments towards self governance that may improve the situation. The chapter aims to show that virtual worlds, such as Second Life, are interesting environments to study social phenomena and their governance.

Privacy is like oxygen, we really appreciate it only when it is gone.

—Charles Sykes (1999)

INTRODUCTION

In 1992, Neil Stephenson published the sci-fi novel Snow Crash. In this novel, Stephenson sketches the US in a distant bleak future where government has been almost completely replaced by private organisations and entrepreneurs who run sovereign suburban enclaves, called 'Burbclaves'. The book's fame, however, mainly derives from one of its key features, 'The Metaverse', a computer generated 3D environment in which the book's protagonist spends considerable time. In the Metaverse, players move around as Avatars. The basis of the Metaverse is 'the Street' which is '… subject to development. Developers can build their own small streets feeding off the main one. They can build buildings,

parks, signs, as well as things that do not exist in Reality, such as vast hovering overhead light shows, special neighbourhoods where the rules of three dimensional spacetime are ignored, and free combat zones where people can go to hunt and kill each other.' (Stephenson, 1992, p.23).

The Metaverse clearly was the inspiration for what is now known as Second Life (SL), an online game offered by Linden Lab.[2] Snow Crash also contributes to Second Life on another level. The burbclaves described in the novel may turn out to be the governance model to which Second Life is moving. Second Life is therefore turning Stephenson's thought experiments[3] into reality in more than one sense.

Second Life has evolved into one of the popular online Multi User Virtual Environments (MUVEs) with at present some 14 million Residents.[4] Unlike the related Massively Multiplayer Online Role Playing Games (MMORPGs), Second Life lacks a content-driven plot; the users define what SL is used for.

Perhaps because SL lacks a plot and instead provides a powerful platform for social interaction, the idea has been coined that SL can be regarded as a social microcosmos which would potentially make it a unique research platform for the social sciences and clinical therapy (Yee et al., 2007).

One of the interesting phenomena to study is that of privacy. Privacy is a basic human and social need (e.g., Westin, 1967). It is a multidimensional concept, with physical (e.g., bodily integrity), spatial (e.g., home as a private sphere), relational (e.g., private conversations), and informational dimensions. Since the rise of ICTs, informational privacy has gained importance. Informational privacy is often associated with the notion of informational control: 'being in a position to determine for [oneself], when, how, and to what extent information about [oneself] is communicated to others' (Westin, 1967 p. 7). Informational control allows individuals to define social contexts in which they present different aspects of themselves. For instance, your boss (generally) does not enter your bedroom, and your grocer does not (need to) know where you

work. Audience segregation is considered to be an essential aspect of identity (cf, Goffman, 1959) and necessary to create and maintain social relationships (Rachels, 1975).

Privacy is a value worth protecting in itself, but is also instrumental to other values, such as personal autonomy, emotional release, and self-evaluation. It also plays an important role in society at large. Free speech, which is essential for public debate, is served by anonymous speech, for instance. Privacy therefore is not only an individual value, but also a social one. Privacy is, or should be, built into systems and organisational practices and procedures (e.g., Regan, 1995).

The meaning of privacy and the way people and society value privacy changes over time. ICT developments have an eroding effect on informational privacy because ICTs create data traces that can easily be stored, combined and exchanged (Koops & Leenes, 2005). This has led some to conclude that we no longer have any privacy (e.g., Froomkin, 2000; Sykes, 1999). The middle ground is that even in social networks privacy is considered important, even though users don't act according to their concerns (e.g., Acquisti and Gross, 2006).

Second Life offers its users an almost unlimited means to expose themselves. This provides an interesting test bed to explore privacy and the changes over time in its valuation. Questions that can be raised include the following: SL residents have a certain amount of informational control, but how much control do they have? How is this control affected by other players and the environment's architecture? How is privacy regulated in this environment? Is this adequate, given individual and societal concerns? The malleability of the technology and rules/regulations even allow SL to function as a test bed to explore the effects of certain privacy regimes on the users attitudes and needs (Bradley & Froomkin, 2003). However, this is beyond the scope of this contribution.

Studying privacy in Second Life is challenging because of the permeability of the virtual world real world border. Inworld privacy concerns, such as anonymity, reputation and control over who is

watching, and when (EPIC & PI, 2006) are also 'real' concerns. Value created within the game (in Linden$) can, for instance, be exchanged against US$ at the Linden Exchange (the LindeX), making virtual value real value. Furthermore, SL Residents also have Real Lives and talk about their First Life inworld, and also inworld activities may have real world ramifications. In this chapter we will mainly look at inworld privacy, but we will also explore some inworld—real world issues.

We will start by exploring SL privacy issues and privacy regulation. Next we will see how Residents and game creators handle privacy issues. Finally, we will look at the state of governance and its current problems. We will conclude by looking at some current governance developments and what effects they could have on privacy.

PRIVACY IN SECOND LIFE

Social interaction is an important motive for people to assume a Second Life. The system clearly supports social interaction. Second Life offers its Residents facilities to make new friends and locate and meet existing friends. The system's defaults are openness and transparency of its users. Sharing information is an important aspect of social interaction, yet information sharing is not unconditional. People also need to be able segregate audiences (Goffman, 1956) and to play different roles in different arenas. I present, or rather others construct, a different image to my colleagues than to my girlfriend or to my buddies at the pool club. Individuals need to be able to control who has access to what information as part of their right to informational privacy. Control, however, is not absolute, nor has the individual an absolute right to withhold all personal information from others. I have a legal obligation to show my driver's license when requested by the police, but not when requested by my neighbour.

The privacy configuration—by which I loosely mean the amount of transparency of an individual to others, the control one has over one's personal data, the kinds and incidence of privacy infringe-

ments, and the regulation relating to privacy and personal data—is in constant flux. Furthermore, the Real World privacy configuration differs from that in Second Life.

In the following sections we will discuss the inworld privacy configuration in Second Life. I will not discuss Linden Lab's role as an entity that could infringe on the privacy of the players here (this topic is addressed in Leenes (2008)), but only consider Linden's role in SL governance—setting the game's regulatory framework and enforcing the rules.

The Default Privacy Configuration

By way of illustration we will first explore some of the environment's default settings.

Residents engage in Second Life by moving around their digital identities (their avatars) in a 3-D environment. They observe the scene either from a first person perspective—looking through the avatar's eyes—or from a third person perspective—a camera that hovers somewhere above the scene. In first person perspective the avatar cannot move and interaction with the environment is similar to that of a real person in the real world. This is different when the third person perspective is employed, which is the default in SL. This perspective allows the player to move the camera independently of the avatar and even take it far away from the avatar. The camera can therefore be used as a spying or stalking device to unobtrusively observe other Residents and their interactions. It can even be attached to another avatar without its consent or awareness. The third person perspective extends the individual's field of vision considerably when compared to the real world, and allows the Resident to intrude other Resident's personal spheres without being noticed so as to observe them and their interactions.

In the Real World individuals can move about relatively anonymously in public spaces. Most people can go about anonymously on a market square of a medium sized city. This is different in Second Life. Although Residents can easily, and radically change their appearance which makes it difficult to recognize them, this does not make them

anonymous because the avatar's name hovers above its head giving away its identity.

The avatar's name does not expose the Resident's Real Life identity because it consists of a freely chosen first name and a surname selected from a list of predefined surnames during registration. The avatar's name is the identifier to a Residents online identity, or *digital persona* (Clarke, 1994). It not only allows Residents to recognise each other, but also serves as the pointer to information about a certain digital persona accumulated over time. Finding out the basics about a certain Resident is made very simple by right-clicking on an avatar, or by using the system's global search function which brings up their personal profile. This profile contains sections about their 2nd Life—including photo, date of birth, partner, group memberships, and a 500 char description of the Resident –, websites of interest, inworld interests, and 1st life—where one can provide information about one's real world identity. Residents control their own profile and therefore control what others get to see about them. Many profiles contain little information. Residents tend to display their group memberships and areas of interest in SL, but usually keep their 1st Life field empty. This suggests that users want to keep their 1st life private and really treat Second Life as an alternative life. Within their Second Life they are open to social interaction and therefore signal their interests to find similar souls.

Second Life also has powerful facilities to locate Residents to facilitate social interaction. It has an extensive directory that allows any nameable item to be found. Residents and places can be found by entering partial names or words. The location of the requested places can be shown on a map, and the Resident can be teleported right to it. Residents can easily find out whether another Resident is online by sending an Instant Message (IM). It is also possible to maintain a Second Life personal directory about their inworld friends which automatically shows online status.

Residents communicate by means of typed text and by voice (which was introduced to the game in 2007). In the text mode Residents can use chat and instant message to communicate. In chat mode, all communication within a radius of about 20 metres is visible to the player (96 metres for shouts, 5 metres for whispers). This allows them to monitor the communication between other nearby Residents, much like in the real world. A difference being that one can't whisper in SL; all conversation is visible. In voice mode, a Resident can hear voice, chat within a distance of 60 metres (first person perspective), or when the 'ears' are associated to the camera in the third person perspective from up to 110 metres away. When private conversation is desired, one has to switch to instant messaging, which resembles RL phone conversations. In the default mode, Residents and their interactions are more transparent than their masters are in their real lives. This is probably intentional because many aspects outlined can be seen as features to enable social interaction instead of as bugs that affect the players' privacy.

Exercising Control

Many players adjust the settings in the game or take other actions to gain control over the data they disclose to others in the game and to limit the information others can collect.

The privacy preferences can be modified. User configurable options are whether your profile shows up in a search, and whether your online status is visible to friends. It is also possible to manipulate your online status; you can mark your status as busy or away while you are in fact online and at play. Both settings suggest unavailability of the avatar which provides a way of going about in the game undisturbed by your friends (unless one bumps into one of them, of course).

Another way to gain privacy is residing on a private island (private estate). Access to such an estate by teleporting can be controlled by its owner which makes them enclaves where only the 'happy few' can go thereby offering a maximum level of privacy. Another method of seclusion is living in a skybox, a private home high up in the sky that can only be reached by avatars equipped with flight assist scripts.

Alternate Accounts or Alts provide a more relevant way to obtain privacy. Alts can be created by any SLer and allow the user to maintain different identities in SL linked to a single email address. You can go to an island as a primary avatar and switch to an Alt when visiting another. Alts are unlinkable for the other Residents and therefore facilitate audience segregation. Alts are popular among users who engage in SL as part of their business or profession. For instance, companies such as IBM have a significant inworld presence. IBM employees active in SL have primary accounts that mark them as IBM employee. Instead of creating separate accounts for their private SL activities, many IBM users use their Alts when they don't want to be recognisable as IBM employees.

Alt accounts are also abused by those who want to avoid accountability for their actions. Misconduct, such as 'griefing'—making other Residents' lives miserable by acts such as trolling, flaming, and spamming—is one of the obvious uses of Alt accounts. When introduced, Alt accounts were only available to premium users. Currently all users, including those with basic—unverifiable and therefore anonymous—accounts can create Alt accounts. This has not led to and increase of abuse in SL; there has been no increase in Alt abuse reports (Linden Lab, 2006c). Alts may not be very popular in practice. The 2007 EPN study (EPN, 2007) shows that almost 75% of the Dutch respondents don't have Alts. Yet the study also reports an average of 1.6 avatars per respondent, meaning that the remaining 25% of the players must have many Alts.

Inworld Privacy Infringements

Many real world privacy infringements have their counterpart in SL due to its resemblance to the real world; people are curious and nosy in SL as they are in RL. Whenever Residents interact there is the possibility that others listen to their conversation. These conversations reveal information about the participants and keen observers can use the tools outlined above to find out more about them. Inworld conversations are not restricted to inworld

activities. In fact, judging from our own experience, certain areas of SL—0031, the Dutch island for instance—are used as virtual market squares where just about anything is discussed, especially relating to what people do in the real world. You can therefore easily learn about other Residents' real world identities and use Google to help fill in the blanks.

If you want to know more about a particular Resident there is even inworld help to obtain information. There are inworld detective agencies, such as the one run by Markie MacDonald (Linden, 2005), which can be hired to spy on avatars or to set up 'honey pots' to uncover inworld infidelity. These activities clearly affect the privacy of the targets and their effects need not be confined to the 'game'. These covert operations aim at monitoring or inducing behaviour exhibited by individuals (by way of their avatar) and therefore relate to real people. Hamlet Linden's interview (Linden, 2005) with one of Markie's customers (Laura Skye) illustrates this. Laura stated that discovering her inworld partner, who also is also her partner in Real Life, to be unfaithful inworld she would not only terminate her SL relationship with him but also terminate her real life relationship.

Bugs and Devices and Information Leaking into the Real World

There are also numerous devices—bugs—to monitor conversations and chats on sale in SL (Linden, 2007). These bugs can be placed anywhere within SL, including on Residents. As we shall see later on, these devices are illegal within the game, but this does not stop people from using them, just like in the real world. Not only conversations can be monitored, but also avatar whereabouts and relations can be monitored. For example, the SLstats watch (Mistral, 2006) which reports the location of the watch wearer plus any other avatars near the watch to a database outside the SL realm on http://www.SLStats.com. This site maintains a list of the watch wearer's friends based on avatar proximity and duration. This in itself infringes the

privacy of these 'friends' because most of them will be unaware of the watch's function, but the effects are even bigger when you consider that the database is hosted on a website outside SL. This means that anyone, not just Residents, can discover your inworld associations.

The introduction of SLStats.com has caused privacy advocates to complain about potential issues such as stalking, and RL employers to draw false conclusions from the suspect data (Mistral, 2006a; 2006b). As a result of this outcry, the functionality of the website has been downgraded. Linden Lab has not reacted or taken action with respect to the SLStats watch/site (Mistral, 2006b).

The SLStats watch and website illustrate where the real privacy issues in SL lie: (third party) data aggregation and the possible use of these data for data mining. Just like in the real world and the Internet it is not so much your nosy neighbour but rather 'superiors' such as parents, teachers, employers and governments, and profiling and data mining by business and government who pose serious threats to your privacy. The threat may at present be limited, but scripted applications, such as the SLStats watch show that they are possible. In this respect Linden Lab is not really helping to keep personal information contained within Second Life. Linden is implementing a new search feature which even facilitates this data flow:

"Be aware that the new search results will be available to the public, once it's released, anyone with a web browser can view them from the Second Life website. The search results may also be picked up by other external search engines such as Yahoo and Google, although we are not explicitly asking search engines to crawl them at this time. It's important to remember that this information is not tied to your real life identity and is the same information that anybody could see with a free Second Life account."[5]

The information that can be found using the new search features was indeed already available to Residents, but this statement neglects a subtle issue. You must register to become a Resident, which involves entering into a contract. In its Terms of Service (ToS) the contract contains privacy protection provisions to which the Residents are contractually bound. This regulates behaviour within Second Life and gives the users' legal means to complain and seek redress. When the same information becomes available outside Second Life, the protection offered by the ToS becomes useless. Non-SL users are not bound to terms in the SL ToS when they search for information using Internet search engines. This means that inworld privacy breaches, even by people with a free SL account, can be addressed on the basis of the Terms of Service, whereas protection is absent on the Internet at large.[6]

GOVERNING THE METAVERSE

This brings us to regulation in Second Life. Regulation can generally take the form of a combination of four modalities (Lessig, 1999): social norms, law, market and architecture. In this chapter we confine ourselves to law and architecture because these are the most prominent instruments for regulation in SL.

Regulation by means of the architecture is regulation by computer software, or 'code' (Lessig, 1999). Software (in this case the SL client) enables the user to perform certain actions, prohibit certain actions and does not implement features or functions that might be implemented had the developers made different choices. In other words, what users can do is determined to a large extent by what the software allows them to do. For instance, irrespective of the question whether monitoring of conversations by bugs is permissible by any (legal) standard, Linden can make the act of creating bugs or attaching them to objects possible or impossible. The range of control by changing the software or the parameters within the software and hence on user behaviour is significant (e.g., Grimmelmann, 2005). Teleporting, creating skyboxes, recording conversation, stalking avatars, are all controlled by the (implicit) rules embedded in the software.

Linden Law

A second source of regulation is law. It consists of the regulatory framework within which the developers and Second Life as a service operate, and the regulatory framework that Linden enacts for its customers. The former category is complex. Firstly, Linden Lab, being a US corporate entity, has to comply with US law. Secondly, because Second Life runs on a distributed network of servers stationed in multiple countries and attracts users in many countries, also foreign regulation, such as the EU Data Protection Regulation (e.g., 95/46/EU) has to be observed. We will concentrate however on the regulatory framework that Linden has enacted for its customers, on what is coined as the "Linden Law": the Terms of Service and the Community Standards. These documents codify the social norms (as Linden sees them) into written rules. The participants in Second Life enter into a contract with Linden Lab when they register for the game. This legally binds both Linden and the user to the provisions in Linden Law. Linden Law therefore provides Linden Lab with an instrument to regulate the behaviour of the players in Second Life. Linden Law can be changed at any time, and in fact occasionally does. For instance, voice was introduced in 2007 and this may have fundamental effects on the way commercial and social bonds are formed in the game (Aiken, 2008). The following therefore necessarily only describes the state of the regulatory framework in SL at a specific moment in time, January 2008.

Enforcement of the rules outlined in 'Linden Law' is handled in two ways, both ultimately involving code. When rules are (implicitly) embedded in code, such as in the case of a hypothetical ban on bugs, the enforcement will be automatic; the software will simply prevent the user to perform the impermissible behaviour. In the case where rules in the Terms of Service or Community Standards are at play, punishment also involves code. The three most important forms of punishment in Second Life are warnings, suspension (temporary or permanently) and banishment to "the Corn Field",

a moonlit environment consisting of rows of corn, two television sets, an aging tractor and a one-way teleport terminal allowing no escape.[7] When suspended, the user can log in but is immediately teleported to the Corn Field and is unable to leave for the duration of the punishment.

Privacy Regulation

The primary privacy framework consists of the Community Standards and the Terms of Service. The Community Standards sets out six kinds of undesirable behaviour, the Big Six, that may result in suspension, or even expulsion from the game. Rule 4 of the Community Standards addresses privacy in the form of a data protection clause as one of the Big Six:

"4. Disclosure
Residents are entitled to a reasonable level of privacy with regard to their Second Lives. Sharing personal information about a fellow Resident --including gender, religion, age, marital status, race, sexual preference, and real-world location beyond what is provided by the Resident in the First Life page of their Resident profile is a violation of that Resident's privacy. Remotely monitoring conversations, posting conversation logs, or sharing conversation logs without consent are all prohibited in Second Life and on the Second Life Forums."

Residents can file abuse reports using a form available within the Second Life application. Each abuse report will be investigated by the Community Affairs Committee, run by the Linden team. According to (Linden, 2006b), the Abuse Team investigates each abuse report using screenshots, chat logs (meaning that Linden stores conversations) and other tools to make sure that the claim is valid. Based on this evidence, the Abuse Team will determine whether an offence has been committed and, if so, it will take action against the wrongdoer. The reporter will be notified and the suspension will be reported publicly (without providing details with respect to reporter and wrongdoer) on the Police Blotter page[8] on the Second Life website.

For serious misconduct, defined as warranting a two-week suspension, a *Review for Ban* procedure will automatically be triggered (Linden, 2006a). The Linden staff review the offender's entire disciplinary history to determine whether a permanent expulsion is in order and seeks the advice of the Resident Review Panel on the anonymised case at hand. The Resident Review Panel consists of 25 active Residents, chosen anonymously and at random from the entire Second Life population.

The Community Standards are part of the Terms of Service. The ToS provide an abstract privacy provision which falls under the blanket clause for (im)proper conduct within SL which is provided by Article 4.1, which reads:

"4.1 You agree to abide by certain rules of conduct, including the Community Standards and other rules prohibiting illegal and other practices that Linden Lab deems harmful."

The scope of 'other rules' is not specified and could include much more than what is defined in Article 4.1's sub-articles, most notably sub-article iv, which states:

"you agree that you shall not: … (iv) take any action or upload, post, e-mail or otherwise transmit Content as determined by Linden Lab at its sole discretion that is harmful, threatening, abusive, harassing, causes tort, defamatory, vulgar, obscene, libellous, invasive of another's privacy, hateful, or racially, ethnically or otherwise objectionable;"

This provision, unlike CS rule 4 which defines a complaints based offence, defines behaviour that can be addressed by Linden at any time, even without prior complaint by a Resident. Furthermore, Linden, by virtue of 'as determined by Linden Lab at its sole discretion', provides itself with unlimited powers to define behaviour as offensive.

There are also other provisions relating to privacy. For instance, the practices of private detectives might be illegal because they appear to breach Article 5.1 sub ii of the Terms of Service, which states:

"[You shall not] impersonate any person or entity, including, but not limited to, a Linden employee, or falsely state or otherwise misrepresent your affiliation with a person or entity."

The target of covert operations will usually be unaware of who the agent is and what their true affiliation is (i.e., I am not here to befriend you, I am here to try and trap you) (Samian, 2005). Such conduct could be considered impersonation as included in ToS article 5.1 sub ii. As said, if this conduct is illegal, the perpetrator can be suspended by Linden Lab.

Residents can be 'prosecuted' by the Lindens for offences defined in the Terms of Service and the Community Standards. The options for punishment are defined in article 2.1 ToS, which states that:

"Linden Lab may suspend or terminate your account at any time, without refund or obligation to you. Linden Lab has the right at any time for any reason or no reason to suspend or terminate your Account, terminate this Agreement, and/or refuse any and all current or future use of the Service without notice or liability to you."

This provision is very broad because it states that the Lindens do not have to provide proper cause for any suspension or termination of an account. This opens the door to arbitrary decisions without accountability, which from a governance perspective is undesirable. Which brings us to the topic of governance in Second Life.

GOVERNANCE IN SECOND LIFE

On paper, the Terms of Service and the procedures designed by Linden incorporate much room for them to act on their own discretion. They are open to suggestions, but consider making decisions about the rules and enforcement their call. Since Second Life is their product, this does not seem unreasonable. If users don't like the terms and conditions of the game, they are free to leave. In practice it

is not that simple. SL users create real value in SL and build social capital in the game. This makes leaving the game different to just going from one supermarket to the next to buy a loaf of bread. We will return to this issue later, but first we need to explore Linden's position.

From the outset of Second Life's existence, Linden Lab,"…has portrayed itself as a common carrier and platform rather than as administrator or government, leaving dispute resolution to its residents and avoiding the creation of formal dispute resolution policy" (Mayer-Schönberger and Crowley, 2006). Despite the considerable powers it has attributed to itself in the Terms of Service, Linden has kept its interventions to minimum and at least passably fair (LGSG, 2007a). This leads to an interesting paradox, because when Linden Lab do interfere, they do so as 'benevolent dictators', doing what is best for the community, without democratic participation or assurance of transparency (Mayer-Schönberger and Crowley, 2006). Linden combines extreme laissez faire (non intervention whenever possible) with dictatorship.

There are two related questions that can be raised concerning this model of governance. First, is 'non interventionist benevolent dictatorship' a proper form of governance for an online virtual community and second, what is a suitable form of governance for Second Life from the perspective of a right to privacy?

Regarding the appropriateness of the governance model, the Lindens can build on experience in other online communities. All online communities struggle with governance issues. LambdaMOO is a famous and documented example that (accidently) has experimented with different models (Curtis, 2002). When faced with players moving around objects without their "owner's" permission in 1992, Pavel Curtis, the game's initiator drafted LambdaMOO's 'law' to make the game's rules explicit. Soon after, enforcement of the rules was attributed to a small group of system administrators (the Wizards) in the Architecture Review Board (ARB) who started acting as police, judges and executioners. The ARB was met with suspicion by the gamers: 'How was it formed? Who chose those particular people and why? How do they make their decisions? What is said in the Star Chamber? Why can't we go in there? It wasn't (at least at first) that anyone knew of anything bad actually happening around the ARB; its very existence, and the way it was created, were enough to worry some players.' (Curtis, 2002). Because of the ARB's high burden, Curtis decided to change the governance and the ARB no longer made 'social decisions'. LambdaMOO turned into a rough place where '[t]he level of inter-player strife and harassment rose and rose, slowly but inexorably'. This led to yet another kind of governance, a self-governance system by means of ballots. However, because '…the voting population could never agree on anything of real substance', not many petitions reached ballot stage and this model also seemed to fail. Curtis (2002) concludes '[d]eep in its very structure, LambdaMOO depends on the wizards and on the owner of its machine. These are not and cannot be purely technical considerations. Social policy permeates nearly every aspect of LambdaMOO's operations, and only the wizards can carry out those operations'.

The conclusion that can be drawn from the LambdaMOO experience seems to be that some form of central authority is required to enact and enforce rules in an online environment.

Linden enacts the rules in Second Life, but it is reluctant to enforce them. Linden does not want to interfere as a matter of principle, but Linden's enforcement on a global scale also poses practical problems. It would require considerable resources and expertise because there are many Residents (officially over 7 million) and a broad range of possible issues: not only pertaining to the Community Standard's big Six, but also criminally oriented offences ('theft', (ID) fraud, slander) and civil disputes, such as labour and employment disputes and intellectual property related cases.

Both Linden's non interference and Linden's interference lacking transparency and accountability have met critique within Second Life[9] and therefore, it does not seem to be very sustainable in the longer run and many Residents feel something needs to

change. As Aiken (2008) puts it: Second Life is at crossroads: Linden can take full responsibility for the powers it exercises and create a nuanced system of norms, it can empower users to enforce norms or a combination of both.

Linden has acknowledged the governance issues[10] and has opted for instituting a form of local governance. Control will be devolved to local regions, the islands (estates), allowing their owners to enact and enforce their own set of rules and standards (Linden, 2006d). Linden will still handle "problems that threaten the stability of our technical, economic and social structures" and they will police on these matters. Linden, therefore, envisions a federal system of governance with Linden acting as the central 'government' with certain powers and the estates having considerable powers. How this power balance will exactly work out is still unclear and it will depend on the interplay between Linden and the local governments.

The first steps towards this federal model were taken early in 2007. An "Estate Level Abuse program" was introduced that allows estate owners to receive and resolve their own abuse reports in the method in which they best see fit.[11]

An interesting initiative to develop local governance comes from the Local Governance Study Group (2007a, 2007b). The LGSG has made a proposal for a 'bill of rights'/constitution (2007b) that outlines how 'governments/states' ought to be created, their (potential) powers, how they can levy taxes, possible offices of state, the possibility of holding elections, etc. The tools do not prescribe a particular type of governance, but leave this open to the founders, but do prescribe what each government should make public in order for visiting Residents to know what they're dealing with. Governments should have a name, flag or symbol, national anthem, indicate government type (monarchy, democracy), constitution, details about land and citizens and details about decision making and set out the rules of the land. According to the Tools, any parcel of land should be allied to one specific government or no government and clearly mark this.

A system of local governance could make rule enactment and enforcement more effective and could also increase the legitimacy of government. It allows for different kinds of estates to be created suiting the different needs of the participants:

"a large corporation buying a series of islands as a showcase for its products or services might want a system whereby misbehaviour on its lands can be punished by banishment without it having to do any of the hard work, but where it retains ultimate control; a commercial landlord might want a full-fledged system of civil law, including contract and covenant enforcement to entice serious businesses and consumers at once; a group of aspiring businesspeople and artisans wishing to start their own community and share resources might want a democratically elected local council; and an individual who wants an island for creating whimsical artistic follies might want no government at all." (LGSG 2007a)

Privacy in a Federal Second Life

Finally, let us take a brief look at the second question regarding governance: from the perspective of a right to privacy which governance model is desirable? As we have seen informational privacy has been addressed to some extent in Linden Law. Linden Law mainly addresses the individual dimension of privacy. The individual can submit abuse reports when their privacy has been breached by other Residents. Linden does address small-scale issues brought to their attention through the abuse reports, and their number seems to be fairly small anyway. They have not addressed larger issues either, such as the virtual detective agencies and the SLStats watch/site nor do they take an active role to protect Residents' privacy.

As previously stated, privacy issues exist both inworld and in the spill over effects between SL and RL. Inworld, the main issue is that individual players need to be able to define their own personal sphere. They should be able to control their identity and what they reveal thereof to other Residents in different contexts. SL should respect this and not

implement mechanisms that undermine individual control. Furthermore, there should be clear rules describing the rights of the avatars in this respect. If breached, Residents should have means to seek remedies, obtain compensation for damages and offenders need to be punished. More important, however, seem to be privacy issues resulting from the spill over (bidirectional) between Second Life and the Real World because this affects the individual's real life. This requires even stronger measures on the architectural level and on the level of (legal) institutions and enforcement. Because these issues not only affect the individual, but also the (virtual) society, the responsibility to act lies with Linden. The social dimension of privacy, however is hardly developed in Second Life—the architecture of the game does not really value privacy—and all communication in Second Life is monitored. Linden has a God perspective on the environment and its Residents and can use this for every purpose it seems fit.

The current model of benevolent dictatorship is inadequate from the perspective of a right to privacy. Will local governance fare any better?

This will partially depend on the precise relation between the central level (Linden Law enacted and enforced by Linden Lab) and the private estates (local law enacted and enforced by local governments). Different models can be envisioned, just like in the real world. Linden Law could trump local law, just like federal law trumps certain state laws in the US. But one could also imagine Linden Law confined to restricted areas, much like the EU regulation is confined to common market domains, but refrains from substantive criminal law.

What will be the role of the current Community Standards? Would these provide the lowest common denominator or the maximum achievable (possibly not even applicable in all estates)? Given the current privacy climate on the Internet where corporations, by and large, treat customer data as assets, we would not be surprised to see a race to the bottom regarding privacy protection if local privacy regulation is left to the private estates. In this respect, it is important to know who will run

the new 'governments' (in the LGSGs terms). Will commercial landlords put up lower privacy standards than citizen run 'governments'? My guess would be yes, but we will have to wait and see.

With respect to promoting and protecting privacy as a social value, LambdaMOO's main lesson, that social policy has to come from the top (Curtis, 2002), seems apt. In this light we would welcome Linden adopting the role of the global society's moral consciousness by providing a reasonable overall level of privacy protection in Linden Law which is binding to Second Life as a whole.

CONCLUSION

This chapter has illustrated some of the privacy aspects of Second Life. Privacy may, at first sight, seem to be unimportant because Second Life is, after all, 'just a game'. We have endeavoured to argue to that Second Life is more than a game. It is a synthetic world and a social microcosmos that can play an important role in individuals' social interaction. It supplements other modes of ICT-mediated interaction but seems to draw its users more into this experience. The permeability of the inworld-real world barrier makes the environment both an interesting area for the study of human behaviour and it urges us to take privacy seriously in relation to Second Life.

Second Life does not seem to favour privacy much on the architectural level and therefore special attention has to be paid to other modes of regulation. The environment is designed to support information sharing and collecting data about other Residents. Linden Labs as 'governor' of the game also does not seem to value privacy beyond the lip service paid in the ToS. The ToS and CS contain privacy provisions, but their enforcement is rather lax. Linden's resources are limited and Linden does not want to interfere in the game as a matter of principle. This may partially explain their passiveness towards privacy issues. An alternative explanation may be that the governance structure of the game is too immature; a non surprising conclusion that is even acknowledged by Linden Lab.

A change in governance structure has been set in motion. Local governance may contribute to a more mature governance structure and may offer means for Resident involvement in governance (democracy?) and for more serious governance instruments and institutions, such as police and a justice system. The Lindens can learn a great deal from real world theories and experiments with different forms of government, governance, and policy. Fundamental protection of rights such as privacy has to be endorsed by society at large and by the rulers that be. Linden Labs will have to play a role here not only by setting standards in Linden Law, but also by implementing necessary code.

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Key Terms

Information(al) Privacy: Being in a position to determine for [oneself], when, how, and to what extent information about [oneself] is communicated to others.

Audience Segregation: The ability to present different performances (in relation to presentation of self) to different audiences in order to maintain different relationships.

Governance: The use of institutions, structures of authority and even collaboration to allocate resources and coordinate or control activity in society or the economy.

Modalities of Regulation: Regulation can be accomplished by different regulatory instruments. Lessig distinguishes between: law, (social) norms, architecture and market. Architecture in cyberspace relates to the hardware and software that make cyberspace what it is, constitute a set of constraints on how you can behave. (L. Lessig, Code and other laws of cyberspace, 1999)

Linden Law: The Terms of Service and the Community Standards that govern the relation between Linden Lab and Second Life user, and therefore the behaviour of users within Second Life. Linden Law is contract law.

ENDNOTES

[1] This chapter is based on Leenes (2008).
[2] http://www.usatoday.com/printedition/money/20070205/secondlife_cover.art.htm
[3] See for instance the interview in Reason, February 2005, with the author, http://www.reason.com/news/show/36481.html
[4] http://secondlife.com/whatis/economy_stats.php states that there are 13.853.205 as of 1

[5] June 2008, in the 7 days preceding this date, 458,171 Residents had logged into the virtual world.

[5] http://blog.secondlife.com/2007/10/19/new-search-currently-under-development/

[6] This does not mean that there is no privacy protection at all on the Internet. Within the EU, the Data Protection Directive 95/46/EC and its implementation in the member states, for instance offers protection against illegitimate processing of personal data, but the in-world privacy protection and instruments are much more direct and also more enforceable (see below).

[7] http://www.secretlair.com/index.php?/clickableculture/entry/hidden_virtual_world_prison_revealed/

[8] http://secondlife.com/community/blotter.php

[9] E.g., (Mistral, 2006a), or see issues of the sensationalist inworld newspaper AvaStar, http://www.the-avastar.com/slife/jsp/microsite/pages/index.jsp)

[10] See for instance, http://secondlife.reuters.com/stories/2007/01/26/interview-with-linden-lab-chairman-mitch-kapor-in-davos/

[11] http://blog.secondlife.com/2007/04/20/introducing-estate-level-governance/