

# Journal of Virtual Worlds Research

jvwresearch.org ISSN: 1941-8477

Vol. 1. No. 1

ISSN: 1941-8477

“Virtual Worlds Research: Past, Present & Future”

July 2008

## **Avatars Are For Real: *Virtual Communities and Public Spheres***

By

Eiko Ikegami, Department of Sociology, Graduate Faculty, New School for Social Research and Piet Hut, Program of Interdisciplinary Studies, Institute for Advanced Study .

### **Abstract**

*Using the historical example of Tokugawa Japan (1603-1867), we point out how artistic circles provided a “virtual world,” a kind of early modern “second life.” This world gave their participants the opportunity to escape from the vertical, hierarchical, feudal structure through the creation of horizontal public spheres, in loosely coupled networks based on the strength of weak ties. In an often playful way, these aesthetic circles provided alternative forms of sociability to premodern Japanese people. This in turn had a serious impact on the formation of political modernity in Japan. We explore parallels with the virtual world of Second Life. There, too, new public spheres are being carved out, in equally playful and largely apolitical ways, that may yet have profound and unforeseen consequences for society at large. We illustrate our analysis with two novel examples of communicative spheres in Second Life, the Meta Institute for Computational Astrophysics and a broadly interdisciplinary initiative called Play as Being. In conclusion, we see the need for a theoretical revision of the notion of “public sphere” beyond its conventional usage. As the virtual worlds of Tokugawa, Japan and Second Life illustrate, the strength of weak-tie networks can form the basis for public spheres in a surprisingly large spectrum of times, locations and cultures.*

**Keywords:** virtual worlds, virtual communities, Second Life, Tokugawa, Japan.

---

This work is copyrighted under the Creative Commons Attribution-No Derivative Works 3.0 United States License by the Journal of Virtual Worlds Research.

## **Avatars Are For Real: *Virtual Communities and Public Spheres***

By

Eiko Ikegami, Department of Sociology, Graduate Faculty, New School for Social Research and Piet Hut, Program of Interdisciplinary Studies, Institute for Advanced Study .

*We can say that most of our companions in linked poetry sessions are just as close as cousins. Even when we are meeting them for the first time, once we get into the world of linked poetry together, we feel an intimacy with one another. It is only in this way of linked poetry that older people do not feel uncomfortable socializing with their juniors, and that those of noble birth do not shun their social inferiors.*

Sōgi (1421-1502),  
one of the most distinguished poets of  
“linked poetry” in premodern Japan.

*Avatar A: i feel i've gotten to know u both better than friends in real life.*  
*Avatar B: yup, this is the place where I can really express myself.*  
*Avatar A: even though we never met in real life....*  
*Avatar C: ... and we live in three different continents.*  
*Avatar B: I keep being surprised how quickly newbies become oldtimers.*  
*Avatar C: lol, took me a while, but now happy to be part of it all.*  
A conversation in Second Life (2008).

### ***1. New Spheres of Communication***

Second Life is a virtual world that is exhibiting a new kind of existence, somewhere in between that of on-line video games and the real world, but having quite a different flavor from either of those two. Participants are called "residents" rather than "players." They are represented by graphical representations called avatars carrying fictive names, in a kind of role play. However, unlike on-line games where “roles” of avatars are usually prescribed (e.g. a warrior, a spaceship captain, etc.), participants in Second Life can choose and design ever-changing roles for their own avatars.

At first sight, this virtual world may look strange, filled with funny looking people with costumes that you would not imagine wearing in real life. However, the role-playing aspect of Second Life does not imply a lack of seriousness: behind each avatar there is a real person and the emotions that this form of on-line communication triggers are very real indeed. In fact, this virtual land with avatar residents now harbors numerous small communities; casual, loose, and ephemeral, but yet lively enclaves of communicative spheres.

For example, avatars can sit side by side having “drinks” together while enjoying conversations. Furthermore, once getting into focused interactions in the sense of Erving Goffman (1963), avatar meetings in virtual worlds can carry a sense of co-presence that is

stronger than that felt through other forms of electronic communication, such as email, instant messaging, or phone conversations. Even videoconferences, where voice is combined with streaming video images, do not allow the participants to walk around, or to interact in any other way than by waving to each other and holding up objects in front of the camera. In contrast, avatars in a virtual world are free to explore the totality of their joint spaces. The intimate sense of co-presence and being-togetherness has to be experienced to feel its full impact. (See, e.g., Castronova, 2007; Guest, 2007; Ludlow & Wallace, 2007; Au, 2008; Meadows, 2008; Boellstorff, 2008)

The main theme of our paper is an analysis of Second Life as a new type of “public sphere.” The term public sphere is usually associated with sites of political discourse outside the realm of the political institution of the state. In Western Europe, during the last few centuries, the creation of public spheres has gone hand in hand with developments toward political modernity, civil society, economic changes, and in general the rise of a new kind of civility. Social theorists have been debating the nature of this social transformation because it was central to the development of modern democracy. (See, e.g. Habermas, 1989; Cohen & Arato, 1992; Calhoun, 1994)

Traditional journalism uses its media in ways that fit the conventional image of public spheres. However, more recently we have seen the proliferation of various non-traditional types of cyber-based media. Many of these are sites directed at fun-loving ways of communication rather than at a more traditional kind of political discourse. Second Life is an especially complex example of such a novel type of a publicly accessible sphere of communication. Its distinctive style of communications begs to modify the theory of public spheres.

We consider that it might take a decade, at least, to see how this new type of sphere of communication will fully develop. As a first step towards an analysis of this process, in this paper we will attempt to draw some parallels to other spheres of communication in history. We will argue that Japan's history of the last few centuries, compared to European history, provides even more interesting comparison material for interpreting what avatar-based virtual worlds such as Second Life may be moving toward. The key here is the way in which Japanese art circles—fluid, casual, yet vibrant networks of non-political activities—effectively formed a “virtual world,” a kind of Second Life itself, within early modern Japan. This early virtual world unintentionally created a condition for developing political modernity in Japan by creating a culture of horizontal sociability.

The historical study of associational life, in particular the formation of voluntary and horizontal associations, has gained extensive interest in the social scientific literature because of its positive implications for the quality of civil society and democracy. (E.g. Putnam, 1992, 2000) For a long time, the emergence of voluntary associations of individuals formed outside the realms of the political institutions of the state and the primordial ties of the family have been considered to be necessary conditions for the rise of modern democracy. However, too little attention has been paid to the importance of “weak ties” in the sense described by Mark Granovetter (1985) and of opportunities for switching network connections.

It is crucial to shift our focus in this context to sites of public spheres that emerge on the basis of the more casual and flexible social interactions and to ephemeral voluntary human ties, which have historically provided society with increased flexibility by providing open circuits for

communication. When strongly cohesive horizontal associations gain hegemonic power, they might impose suffocating disciplinary effects on their members while excluding others. In contrast, when a society harbors network connections that allow relatively casual forms of shifting and reconnecting, citizens can be empowered in more open and flexible ways. The sites of communications that temporarily allow people to decouple from existing strong ties might become precious spheres of sociability. (Ikegami, 2004, 2005a, 2005b) The premodern Japanese case highlights the power of such communicative sites built on numerous weak-tie connections and small groups.

The authors of this paper have become involved in Second Life from different angles. Ikegami, a sociologist, studies historical and contemporary forms of public spheres, civility and associational activities. She also has initiated theoretical studies of political and cultural implications of weak-tie based relations and switching network connections. She became a “resident” of Second Life because of her interest in this new form of communication. She also has written extensively on Japanese aesthetic sociability and Japan’s distinctive route to political modernity (Ikegami, 2005a). Hut, an astrophysicist, originally developed his interest in virtual worlds because of their potential to provide interactive tools for scientific collaborations. After being invited to give a few lectures in Videoranch, based on Active Worlds, he established two Qwaq-based organizations, WoK Forums and the forerunner of MICA (see Hut : 2008 for references), during 2007. Starting in 2008, he shifted his main activities to Second Life, where he established PaB (see section 8). MICA is currently more broadly focused, covering applications in Second Life, Qwaq, and other virtual worlds, though its meetings all take place in Second Life (see section 7).

We present here a kind of interim report on the distinctive potentiality of virtual worlds based on on-line 3D technology, drawing on our own distinctive perspectives as well as our observations and experiences as “avatar-residents” in Second Life. In this paper we develop historical and sociological arguments showing the power of virtual sociability such as role-playing in shaping basic structures in the real world, politically, culturally, and economically. We illustrate our ideas and observations concerning Second Life with a comparative case study, in which we use Tokugawa Japan (1603-1868).

## ***2. Freedom through Fluid Identities***

We have found from first-hand experience that the world of virtual avatars forms a fertile soil for a realistic sense of co-presence. And it is this strongly felt sense of co-presence that is critical for understanding the power of communication in virtual worlds. As we observed and walked around as residents in the community-like virtual world of Second Life, we have found that the current discourse on avatar-based virtual worlds has not yet spelled out some distinctive characteristics and communicative potentiality of virtual worlds based on interactive avatars. Neither the raw experience nor the interpreted sense of meaning of experiencing virtual worlds can be understood in terms of a simple dichotomy of the virtual versus the real.

Comparing Second Life and Japanese aesthetics may seem unusual, even surprising. However, while the massively multi-player on-line 3D technology of Second Life is new, the human search for experimenting with alternative identities in a kind of “second life” is not new at all. Creating an alternative sphere of sociability through second social identities is not unusual, historically speaking. In fact, unlike the usage of the term “virtual” as signifying technologically

created worlds, many sociologists and anthropologists consider that any culture, as such, embraces an aspect of the virtual that is deeply embedded in our understanding of social and physical reality. Specifically, both in Tokugawa Japan and in contemporary virtual worlds, we can find lively communicative activities based on casual, loose, weak-tie network connections with a sense of horizontal fellowship distinct from the outside “real” worlds.

There are several common characteristics of communication in these two cases of virtual worlds. For example, the two forms of communication entail a strong sense of co-presence that encourages focused interactions among members. Although there are different mechanisms at work, they are both “addictively” immersive forms of communication. In either case, they offer a sense of freedom through fluid identities. Furthermore, unlike the conventional idealized image of public spheres, they represent sites for “fun-loving” activities and their means of communication is characterized by artistic distillation rather than so-called “critical rational discourse,” a characteristic that Habermas (1989) once considered the hallmark of his idealized image of “the public sphere.”

All these playful and sometimes even quite silly activities may suggest a total irrelevance for society as a whole. However, such a conclusion would be utterly misleading. Tokugawa Japan’s historical experience indicates that the presence of numerous sites of alternative sociability as publically accessible communicative spheres can yield transformative power, unintentionally or intentionally, when it is coupled with appropriate social conditions. Below, we will have a closer look at the world of Tokugawa aesthetic sociability.

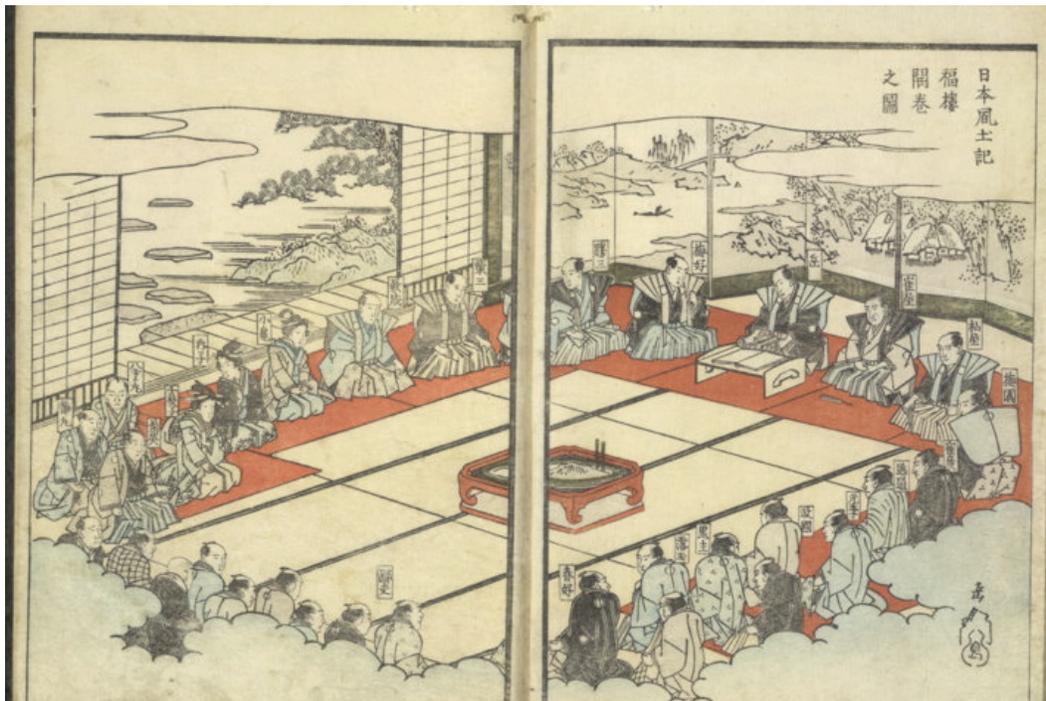


Figure 1. Poetry Meeting: A gathering for a comic poetry contest in early modern Japan. The participants, including three women, had various social backgrounds. A sense of horizontal fellowship characterized such a gathering. A circular seating was a tradition in poetry circles since the medieval period, ritualistically symbolizing the fact that there was no hierarchy among participants. (See Ikegami, 2005a, p.174).



Figure 2. A meeting in Second Life: A group of avatars gathering outdoors to talk about the nature of reality in a playful way, as part of the “Play as Being” initiative discussed in section 8.

In the Tokugawa era, the formation of virtual sociability including role-playing profoundly changed the quality of communication in society at large and in fact has laid the foundations for the extraordinarily rapid political modernization and industrialization of Japan in the Meiji period (1868-1912). Central to this transformation was the extensive popularization of circles and associations that shared interactive aesthetic and cultural pursuits such as poetry making, singing, and tea ceremonies. The procedures of interactive aesthetic productions including extensive uses of artist names were used effectively to create enclaves of virtual realities outside feudal norms that enforced hierarchical sociability.

The various ritual procedures of Japanese aesthetic pursuits in group settings are a case in point. The elaborate constructions of virtual worlds with their own norms, idioms, sensibility, and sociability was extremely attractive for its participants. In the middle of stifling feudal social structures, networks of people who engaged in interactive artistic and literary pursuits could provide much more freedom than “real life” could possibly offer, in a totally immersive and hence very “real” way. The result was an emerging cultural condition that prepared the population of premodern Japan for moving toward political modernity once the country opened up after the late nineteenth century.

The rise of modern polity hinged on the construction of a sense of commonality and fellowship among its citizens. Given that Tokugawa era of Japanese history was a time when the shogun and his vassal samurai dominated society and people were socially and politically divided by strict hierarchical codes of status distinctions. It was almost a miracle that Japan built a modern nationhood with modern political institutions so quickly. One of the main ingredients for this outcome, in our view, is Japan’s early form of a second life in the form of participatory art circles.

### 3. Bonds of Civility in Virtual Worlds: Tokugawa Japan

The premodern Japanese created amazingly robust associational activities centered on various cultural pursuits such as poetry-making, tea ceremonies, singing, and music playing. Samurai, merchants, craftsmen, peasants, the high and the low – such formal distinctions that were so important for their “first life” – could be hidden under the cloak of artistic names and hence forgotten temporarily. Thus, it was not unusual that cultured people had several artist names for different group activities.

Interestingly, people outside Japan who love haiku, the sharply distilled form of poetry composed of three lines of five, seven, and five syllables respectively, are rarely aware of the fact that this form of poetry making was one of the most important drivers behind the creation of voluntary associational networks in premodern Japan. Through learning to compose and appreciate haiku poetry, men and women of humble backgrounds acquired their own forms of self-expression and extended their social networks.

A haiku was originally the first part of many stanzas of *haikai*-linked poetry. The most precious aesthetic moment of haiku-making was thus positioned at the place of interactive creation of chain poem-making, through the excitement and emotional sharing of aesthetic time spent in company with others. Haiku embodied its network poetry not only as a style of poetry, but as least as much as a form of social reality. Individuals who became a part of a poetry circle received cognitive associational as well as actual social networks connectivity.

What is more, once a person had become seriously involved in this form of poetry in their home town, he or she enjoyed automatic entry into other poetry networks anywhere in Japan, given the existence of numerous loosely connected poetry circles all over the country. Even women poets could travel easily and extensively by utilizing these poetry networks. They mingled and communicated addressing each other solely by their poet names. These pen names signified an alternative rule of sociability that made feudal status distinction temporarily null and void. In many cases, it would have been easy to trace the real identity of the players, but that was not the point: even when they knew each others' formal identities, the key was to enjoy a shared stepping out of real life, leaving all that behind for the duration of the aesthetic enjoyment and creativity. (Ikegami, 2005a)

These aesthetic circles and associational networks cut across classes and regions and thus provided alternative realities where people could develop a second life, not as samurai, merchants, or farmers, not as men or women in their prescribed roles, but as individuals liberated from status and gender restrictions. Each person could express his or her love of particular cultural pursuits, unhindered by their formal background. In this way, behind the façade of strict political repression, premodern Japanese people were able to successfully carve out spheres of communication that were effective enclaves of free and voluntary sociability.

Therefore, premodern Japan developed distinctive styles of art, the practice of which crystallized around gathering sites, dominated by a sense of co-presence. The interactive process of art production stood out as central and, as such, forms a stark contrast with its European counterpart, where the typical modern notion of arts and literature emphasizes individual artistic productions. In contrast, in premodern Japanese arts interactive processes formed the most meaningful aspects of aesthetic pursuits. For example, in linked poetry, all participants in a

poetry-making session were simultaneously producers and consumers of poetry. The co-presence and collaborative synergy in spheres of interactions made this art style into a distinctive form of aesthetics and as a result provided important sites of sociability.

#### **4. *Getting Hooked.***

Among the Tokugawa Japanese, many were deeply immersed into, and completely taken by, the excitement and interactional synergic energy bubbling up at the sites of collaborative arts. It is known that the worlds of cultural pursuits were almost addictively seductive for these premodern Japanese people. In fact it was not so much the social function of horizontal fellowship but rather the immersive quality of interactive art forms that was crucial for the popularization of these circles' activities.

In reaction to this seductive immersion, many treatises were written to warn Tokugawa people not to be taken too much by aesthetic hobbies—a direct indication of the addictive aspects of these arts. To give just one example, almost three centuries ago an elderly samurai wrote:

When these men are able to sing popular songs (*jōruri*) well enough, they are given artist names by their teachers. The students feel honored by this treatment. Within their own circle, they address each other only by ‘—*tayū*’, these fake names. Their samurai names are deemed appropriate only for official public matters. In their private life, they use only their ‘—*tayū*’ names. How deplorable!<sup>1</sup>

This old samurai lamented the situation in which his contemporaries of samurai status were all too happy to be honored as entertainers in their private life. Although they were reared to devote their lives to public duties, they relegated their stuffy samurai names for use only in dull official occasions.

Singing samurai knew not only the pleasure of singing love songs, but also the power of creating a virtual reality for free group activities. Politically, Tokugawa Japan was a rigid feudal state. Socializing across status and regional boundaries was out of the question. Although participation in hobby groups was perceived as non-political, and largely harmless and ‘private’ by the authorities, such activities effectively created large spheres of ‘public’ sociability outside the shogunate hierarchical order. Hence, behind the rigid formal rule, civic life in Japan in the 18th and 19th centuries saw large numbers of people effectively establishing a kind of “second life”. And most any one who has become a seasoned resident of Second Life will testify to its similarly seductive nature.

#### **5. *‘Real Life’ and Other Lives.***

Through tea ceremony and flower arrangement to haiku and the game of Go, Tokugawa citizens could escape political pressure and meet each other freely in the safe realms of the virtual worlds of art. In big cities as well as in the provinces—or even in small villages—numerous hobby circles emerged, which allowed people to experience alternative realities. Most

---

<sup>1</sup> *Mukashi Mukashi Monogatari* (Stories of Olden Days, ca 1732) translated by Ikegami. For more detail, see Ikegami (2005, p. 144). *Tayū* was a suffix of an artist name in popular songs called *jōruri*.

of these circles did not have high-flying ideals for horizontal fellowships or any puritanical aesthetic ideals. Some circles were organized by volunteer enthusiasts, but many professional artists also initiated such circles in order to collect fees from amateur students. Just like contemporary Second Life, numerous loose groups showed up, combining voluntarism and commercialism in a fluid mix of shifting forms.

Many hobby circles, in particular poetry circles, were quite loose and casual organizations with circuits that were open to outsiders. They also often organized activities that were accessible and appealing to the fun-loving general public (see figure 3). A non-purposive mingling just for fun might not resemble the conventional political model of civil society. Nonetheless, through such activities, participants met people whom they would not have met in their real life. They would casually exchange their ideas as well as general information, often regarding issues that went quite a bit beyond what might be considered “just for fun.” For example, rumors about political situations could easily and efficiently spread through such weak-tie networks.

In addition, whatever their initial motivations, those people who intermittently experienced alternative modes of sociability, unconsciously or consciously, began to recognize a crucial and subversive fact: the feudal mode of sociability that the shogun enforced was just one of many versions of reality. Thus, toward the mid-nineteenth century, fun-loving hobby circles had quietly changed the culture of sociability in Tokugawa society. So much so, that these networks eventually transformed the qualities of social relations by creating “bonds of civility without civil society,” a paradox when seen through the eyes of a conventional Euro-centric interpretation, but nevertheless an historical reality in Tokugawa Japan.



Figure 3. A scene from a sake-drinking party of Battle of Senju. Although there were many serious artistic and literary pursuits, playfulness also characterized the Tokugawa activities of cultural circles. The network formed by a literary circle thus could become a basis for organizing a fun event such as this sake-drinking contest with a shared spirit of comic poetry. (See Ikagema 2005a, p. 195-196)



Figure 4: An example of a playful time in Second Life, with five avatars enjoying each other's company. After an earlier, more serious discussion, one of them has handed out some bottles to the others to start a little drinking party. Another example of a scene from a "Play as Being" meeting.

There was an unintended consequence of Tokugawa virtual sociability in real life. The old samurai did not see the social power of second life in artistic names and simply considered singing samurai to be lazy bums. However, the constant identity-shifting from an official feudal identity to an artistic one made them realize that feudal distinctions were, after all, not the only kind of identity in the world. This realization was crucial for the post-Tokugawa situation. Japan in the late nineteenth century faced the difficult task of building a modern nation-state based on the commonality of its citizens in a society that had been divided by 260 regional *daimyo* polities, each of them with strict internal status distinctions. At this point, a sense of commonality nurtured in their virtual art worlds suddenly turned out to be important cultural capital for building a modern nation-state that required equalization of its citizens.

In only half a century, Japan succeeded in building a modern state with a constitution, parliamentary politics, meritocratic bureaucracy, and universal public education. At the dawn of the 20th century, Japan found itself to be the first non-western industrialized nation: a dramatic success story of a real world transformed through roots in virtual worlds. The strength of the many weak ties in their networks gave the Japanese the chance to mobilize an egalitarian counter culture powered simply by a desire for having fun.

## ***6. New Public Spheres in the Making***

Just as various types of Tokugawa aesthetic circles and networks cannot be described as a single unified public sphere, it is hard to describe Second Life as a singular sphere of communication. This virtual world with several hundreds of thousands of active residents now hosts numerous sites with diversified purposes. For example, there are numerous commercial establishments that sell fashion articles for avatars, there are show cases of large firms for

advertisement purposes, there are university campuses that experiment with instruction given in cyberspace in various forms, and there are different kinds of museums. New inventive uses of Second Life emerge constantly, often from unexpected directions. Naturally, each site develops a different communication culture. Since Second Life hosts numerous small spheres of communication, it is not easy to describe the culture of Second Life as the whole.

In social scientific literature, a German philosopher and sociologist, Jurgen Habermas set up the current intellectual discourse on public spheres. He had a more restrictive view on this notion than we have, however. Habermas traced the origin of the bourgeois public sphere in late eighteenth-century Europe to the development of social institutions that fostered open debates, such as salons, coffee houses and reading societies. He also characterized his notion of the public sphere as spaces for rational critical discourse in the context of Enlightenment society. He viewed the rise of such enlightened discourse conducted outside the institution of the state as symbolizing the rise of expanding civil society and modern democracy.

To be sure, Habermas assumed “the public sphere” to be a single unified sphere of public discussions in which various small sites of communications were interlocked. We are not asserting that communications that are currently taking place in Second Life fit the model of the Habermasian notion of the public sphere. In particular, when his theory of the public sphere is coupled with an emphasis on the rational mode of discourse, the unified image of the public sphere in a society that Habermas presents differs sharply from what we encounter in robust and diversified communicative activities in virtual worlds.

Rather, the realities of communication currently unfolding in Second Life are closer to the more culturally diversified model of public spheres with attention spread over multiple, flexible sites of communications presented by Ikegami (2000, 2004, 2005a, 2005b). We plan to discuss our notion of publics in the context of complex networks in virtual worlds elsewhere in more detail, in due time. In the current paper we only present a bird's-eye view of the various connections we have discerned, in particular between the kind of aesthetic artistic immersion in Tokugawa Japan and the experience that millions of people have had recently in Second Life.

Casual participants of Second Life might not realize the rich potential for interactive communication of this virtual world. When someone first enters Second Life and wanders around, it is easy to come across many “sims” where nothing seems to be happening. There are just lots of buildings, landscapes and commercial entities without any avatars in sight. Visiting only these sites is likely to convey an impression of walking around in a ghost town. There are various reasons for this, one being the fact that the major mode of transportation in Second Life is teleportation and, hence, roads are typically deserted. So one's first impression may not give any clear feeling for the more intensely communicative sites that can be found plentifully once you know where to look. We found it fascinating to see the spontaneous emergence of many virtual sites with functions similar to those of salons, cafés, pubs, and dance clubs in real life. Once an avatar starts chatting with others in such an open public space, it is common to find other avatars whose owners live in very different parts of the world and who come from very diverse backgrounds. Just like was the case in Japanese linked poetry sessions, avatar meetings also flatten age differences and social backgrounds.

In often joking and playful atmospheres, avatars exchange information, ideas, and rumors in such meeting places. They make new friends and meet old friends, and may end up finding a

new group affiliation. Seasoned avatars tend to be members of many different “groups.” Most of these groups are casual and loose, but share certain kinds of interests, hobbies, or political views. One’s group affiliations can be seen in the “profile” of each avatar, a function designed to promote interactions between like-minded individuals. By adding group affiliations to their public profiles, residents can carve out social identities as avatars in virtual worlds. Such small-scale group activities and their resulting tiny but active publics form the basis for the unique potentiality for creating new public spheres in the age of cyber-globalization.

In order to illustrate the formation of new kinds of communicative spheres in virtual worlds, we will briefly discuss two examples that we are familiar with through direct participation, one in astrophysics, and one broadly interdisciplinary.

### ***7. The Meta Institute for Computational Astrophysics***

One example of a new public sphere is MICA, the Meta Institute for Computational Astrophysics (see <http://www.physics.drexel.edu/mica/>). One of us (PH, Pema Pera in Second Life) started this institute in an informal way in order to explore the possibility of using the virtual world of Qwaq (see <http://qwaq.com>) as a research tool in astrophysics. Initially the idea was to create a virtual institute, like a university department, but independent of any existing university. While Qwaq was and still is the best virtual world as far as its office environment is concerned, with far superior application tools, its administrative structure, at least in 2007, was not ideal for providing a natural path of growth, putting too much of a burden on the administrator of the organization. (See Hut, 2008, for an overview).

Starting in April 2008, MICA moved its focus to Second Life and, from that moment on, the availability of existing networks in Second Life provided the needed impulse to let MICA grow in a sustained way. We now have daily "coffee time" meetings, every morning from 7:30 till 8:00 am, SL time, and several weekly activities, ranging from journal clubs and simulation school sessions to popular talks. In addition, we have started to use the OpenSim open-source equivalent of Second Life to implement some of our astrophysics simulations directly on the physics engine in OpenSim, starting with the work of OpenSim developers Jeff Ames and Adam Johnson, members of the genkii team<sup>2</sup>.

One big difference between MICA and a university department is the fact that in MICA professional astronomers and amateurs freely mingle with each other and with professional scientists with backgrounds outside astronomy. In real life, these three groups hardly intersect. For a computer scientist or biochemist to walk into an astronomy department is a rare event. The physical distance between the different buildings by itself already forms a barrier, which is amplified by the widespread academic culture of compartmentalization. And for an amateur astronomer to walk into a departmental coffee chat in an astronomy department is unheard of. It is just not done, even though many astronomers might well enjoy such mingling, as well as in the case of serious amateurs who might be able to offer skills, time and energy.

In contrast, Second Life as a new world does not have these types of cultural barriers, separating astronomers from other scientists, and separating professional astronomers from

---

<sup>2</sup> <http://www.genkii.com>

amateur astronomers, or from ex-astronomers who have turned to an industrial job, for that matter. In MICA we find plenty of individuals from all these groups who, together, form a new type of public sphere, which has not received any name yet. We could call it an “augmented astronomy department,” but even that may be far too modest a name. An “astronomy marketplace” may be a better term, but that does not do justice to the permanence and staying power of MICA as an institute. Perhaps MICA will even develop into a type of “astronomy village.” We will have to see how its history will play out.

MICA is an example of the distinctive characteristic of avatar-based virtual worlds as new kinds of public spheres, in that it carries a strong flattening effect: participants whose social backgrounds in real life vary greatly treat each other like buddies, all more or less on a similar level. In addition to overriding status differences, virtual worlds also make regional barriers disappear. Participants to MICA come from all over the world, including Canada, the US, the UK, Holland, Belgium, Germany, India, Iran, and Japan.

### ***8. Play as Being***

Another example of a newly created public sphere is the initiative called Play as Being,” (PaB), which was started in April 2008 by one of us (PH). After having spent more than a decade organizing broadly interdisciplinary discussions on web sites (see <http://www.kira.org> and <http://www.waysofknowing.net>), as well as in the real world (as the head of the program of interdisciplinary studies at the Institute for Advanced Study, Princeton, see <http://www.ids.ias.edu/>), he explored similar possibilities in virtual worlds (Hut, 2008).

Unlike the astronomy example above, PaB is not a virtual counterpart of a real life activity. Instead, PaB combines researchers interested in scientific explorations of the nature of knowledge, as well as those with a more philosophical bent, and also individuals with a serious background in contemplative studies. In some sense, PaB could be seen as an initiative at the intersection of science and religion and philosophy. However, instead of the usual lectures and discussions that can be heard in conferences on science and religion, in our case we focus on a more experiential approach.

Taking the basic idea of meditation and contemplation, but distilling its essence from the usual curriculum of years of practice for an hour or more per day, PaB advocates very short nine-second explorations of the nature of reality, but very frequently, typically every quarter of an hour, as a kind of one percent time tax. Treating their own life as a lab in that way, participants in PaB get together four times a day, in ever changing configurations, depending on who has time to come in. During the PaB meetings, some of the discussions are focused on reports of experimental findings, together with attempts at interpretation and further guidance of sustained experiential explorations. At the same time, many discussions are far more playful and light-hearted and, in fact, a typical meeting several times switches between a deeply serious and a far more jocular atmosphere.

PaB also forms a new kind of public sphere, even more radically different from existing public spheres than MICA already is. There is no resemblance with academic departments. The meetings have in some way a flavor of neighborhood café get-togethers; in some way they resemble laboratory meetings, they also have a kind of hobby club atmosphere, and they even resemble monastic meetings. Yet, it is not a café in a particular neighborhood as participants

come from all corners of the globe. It is also not an academic institution although some of us are scholars and scientists. And even though participants often talk about their personal view of spirituality, it is also far from any particular religious sect, church or philosophical tradition.

The informal, friendly, and casual nature of gatherings where individuals are represented by their avatar names invites participants to temporarily decouple from their own existing views and this may make it easier for them to explore different ways of seeing our often unquestioned reality. In fact, as one resident who frequently participates in PaB meetings mentioned to Hut, “PaB allows me to combine elements of monastic practice and lay practice: it is possible to partake in meetings several times a day, as in a monastery, in this virtual world, while still having a family in the real world and holding a regular job there as well.”

### ***9. Virtual Roots for Public Spheres in Virtual Worlds***

The two cases mentioned above illustrate only a small part of the very rich spectrum of communicative possibilities in virtual worlds based on interactive avatars. Nonetheless, the vibrancy of communication taking place in these two spheres, MICA and PaB, though for totally different purposes, is striking. It has led us to reflect on the distinctive nature of interactive communication in virtual worlds.

So far, Second Life has been largely attracting public attention as a tool for certain specific economic, political, or educational “purposes” for organizations already existing in real life. Large firms usually see Second Life as a means for public relations, advertisement, and market research; some organizations have also started to use virtual worlds for facilitating communications among employees. Public organizations in real life such as NASA are extensively exploring possibilities for using virtual worlds as a means of educating the public.

Although all these applications are all interesting means of using virtual worlds, they are externally driven. By and large, they are not produced by indigenous organizations that have emerged from within Second Life. As such, these activities all have an aspect of the real world colonizing virtual worlds. Interestingly, most of these “colonizing” attempts have backfired. Many of the big firms that moved into Second Life early in 2007 have built magnificent sets where almost nobody ever visits. In contrast, home-grown apparel manufacturers are often wildly successful. Small shops run by housewives and students frequently outcompete large real world firms for attention by avatar residents. Through word-of-mouth even small shops can quickly become known in a world full of dense weak-tie networks. And most importantly, these shops cater to the avatars with full understanding of what their needs and interests are, clothes being far more important than, say, show cases for sports cars.

The two examples that we have discussed above can be analyzed in similar ways. MICA, to the best of our knowledge, is the first organization within second life that has been set up by professional scientists as a purely in-world organization. This stands in sharp contrast to attempts by existing real-world universities and government organizations to establish branches within Second Life. MICA is not a branch of any external agency. Rather, it is created, maintained and directed by residents within Second Life. Most of them are professional astrophysicists in real life, but their network connections within Second Life are independent of their real-life affiliations. It is purely a shared interest in exploring new tools for their work that makes them collaborate, not any existing outside structure.

Similarly, and even more strikingly, PaB has emerged totally from within Second Life. No institution in the real world comes even close to resembling its nature and structure. Unlike existing special interest groups that have formed branches in Second Life, the eclectic body of its participants reflects the novel and wildly experimental character of PaB. While it is far too early to even guess how successful this initiative will be, the early signs are certainly encouraging. Within two months after its start, with hardly any form of advertising, meetings are being held four times a day, once every six hours, with a typical attendance of more than half a dozen avatars. Among those, most of them had never met and would probably never have met where it not through the new kind of public sphere that PaB has started to provide.

The homegrown nature of these two organizations is reflected also by the fact that both of them are currently holding their meetings on virtual “land” that is kindly made available by two other all-volunteer organizations. For the time being, until MICA and PaB establish their own buildings on their own land, MICA's main meeting room<sup>3</sup> is located on the premises of the International Spaceflight Museum and PaB's main meeting place<sup>4</sup> is located on the land of the Zen Retreat. Both of these other organizations are fully non-profit and both originated as grass roots organizations within Second Life itself, independent of any outside organization in real life. The fact that MICA and PaB itself sprung up on virtual “land” owned by organizations that were themselves similarly indigenous, is a sign that Second Life is now developing an ecology that is for a large part based on the strength of weak ties in the many overlapping Second Life networks. In Tokugawa Japan, too, what started as spontaneous circles and associations developed in an unplanned way into a conglomeration of loose networks – an example of the strength of overlapping weak-tie networks. (Ikegami, 2005a) Second Life may be just beginning to show signs of this kind of strength, as a spontaneous development of emergent complexity.

Some of the key elements of all these activities that are successful and indigenous are the important role of volunteers coupled with a strong sense of sharing and interacting. As such, there are important parallels with the “open source” communities that have been able to produce competitive software, such as the Linux operating system. The value of interactions between peers in an atmosphere in which collaboration is celebrated has parallels with Tokugawa Japan.

As a start illustration of this, we can listen to the words expressed more than three hundred years ago by Matsuo Bashō (1644-94), the most famous haiku poet in history. He strongly valued the sharing of collaborative spirits at the moment of co-presence. The interactive dynamic of collaboration was the element that Bashō cherished most—as is reflected in his dictum that poetry is “only garbage once it is taken away from the collaborative linked-verse table.”<sup>5</sup> Fortunately, what was seen as garbage by this master poet was in fact published, both in his own time and till the day of today, and millions of people world-wide continue to enjoy his poems. So while there is no doubt an element of exaggeration in his saying, it does reflect the central value that Bashō assigned to joint production in free collaboration within a kind of virtual world of his day. Clearly, what we are now witnessing in the new medium forms of virtual worlds has historical precedents in unexpected and unexpectedly venerable places.

<sup>3</sup> <http://slurl.com/secondlife/Spaceport%20Bravo/153/205/59>

<sup>4</sup> <http://slurl.com/secondlife/Rieul/230/203/74>

<sup>5</sup> This saying was cited by Bashō's disciple, Dohō's “Sansansasshi.” See Ikegami (2005a).

## ***10. Second Lives, Past, Present, and Future***

We have observed and analyzed sociability in virtual worlds both past and present. Our example of Japan is just one of many that could be used. We should note that while the massively multi-player on-line 3D technology of Second Life is new, the human search for experimentation with a form of second life, through creating alternative spheres of sociability, goes back many centuries. For example, various types of monastic orders offer spaces for alternative realities, by encouraging individuals to decouple from secular social relationships, culture and values. Such alternative spheres of sociability have been often coupled with people's search for the possibility of creating a new social order built on the horizontal association of free individuals rather than on structures of vertical integration. The distinctive characteristic of Tokugawa Japan's aesthetic circles is that participation to these circles did not imply the abandonment of one's social affiliations and identities in real life. Rather, participants acquired the option of opening up their usual routine of social interactions by entering circuits of social networks existing in a kind of virtual world. It is in this sense of providing sites for switching network connections through weak-tie interactions that we consider the particular similarity between the case of premodern Japanese aesthetic circles and the case of Second Life.

Given the historical precedents that we have discussed here, it behooves us to watch the current growth of on-line virtual worlds with more than passing interest. The collection of many different virtual worlds that are now sprouting up allows millions of people globally to interconnect and to form a very dense and strong global tapestry of interwoven networks based on weak ties. These virtual worlds have rich potential for creating unconventional sites for new types of public communications. We still have to wait a while to see whether further careful *cultivation* of this potential can bring about positive social impact. However, if we want to influence this process and improve the odds for positive results, the time to do so is now, while everything is still so very much in flux.

In several places in this article we have pointed out how a powerful aspect of virtual avatar communications lies in the fact that participants are prompted temporarily to decouple from existing ties. This reminds us of the current global situation in which the democratic process of many polities are malfunctioning due to the fact that people cannot get out from the grip of their narrow group interests. After the collapse of the Soviet Union, many intellectuals once became optimistic about the future of democracy and, indeed, there has been a significant worldwide expansion of the introduction of democratic institutions such as choosing top leaders through elections. Soon, however, it became clear that the expansion of mechanical systems of democracy does not guarantee the quality of democracy and the health of civil society in political processes. We now observe many polities violently divided by strong loyalties to various seemingly more primordial ethnic and religious ties.

Could it be that virtual worlds, accessible to anyone with an internet connection, can offer citizens in a global world new forms of freedom from the tyranny of local interests? Technology alone cannot provide an answer to such a major question. Nonetheless, opportunities such as a decoupling from existing ties and freedom in switching one's identity in virtual worlds without incurring a penalty in the real world might well form promising seeds for developing a new culture of global civility. And could these new freedoms, at first resembling a make-believe world of play, actually have a profound impact on future global developments?

We do not know what the consequences will be for the world. But if history teaches us anything, these consequences may be monumental and quite a bit farther reaching than most of us are willing to entertain. Current journalistic discourse on virtual worlds tends to focus far too much on the business potential of this new technology. Nonetheless, the distinctive characteristics of animated avatar based communication only recently has received scholarly attention. Second Life, and its fledgling sister worlds, deserve a second look by all of us. Their real potential may be to galvanize the real world in ways that nobody can yet foresee.

**Acknowledgements:**

We very much appreciate the presence of our many friends in Second Life, their generous help, and their participation in many vibrant activities including the MICA and PaB projects mentioned in this paper. We thank our fellow SL residents who gave us feedback on a draft of this paper, especially Stormerne Hunt (Storm Nordwind in SL) for his detailed comments. We are grateful for receiving a grant from the Fetzer Foundation, to Piet Hut and Steven Tainer, for the study of virtual worlds in the context of modern contemplative approaches.

## Bibliography

- Au, W. J. (2008). *The Making of Second Life: Notes from the New World*. NY: Collins.
- Boellstorff, T. (2008). *Coming of Age in Second Life: An Anthropologist Explores the Virtually Human*. Princeton, NJ: Princeton University Press.
- Calhoun, C. (Ed.). (1994). *Habermas and the Public Sphere*. Cambridge, MA: MIT Press.
- Castronova, E. (2007). *Exodus to the Virtual World*. NY: Palgrave.
- Cohen, J. & Arato, A.. (1992) *Civil Society and Political Theory*. Cambridge, MA: MIT Press.
- Goffman, E. (1963). *Behavior in Public Places: Notes on the Social Organization of Gatherings*. NY: Free Press.
- Fine, G.A. & Harrington, E.B. (2004). Tiny Publics: Small Groups and Civil Society. *Sociological Theory*, 22, 341-56.
- Granovetter, M.. (1985). The Strength of Weak Ties. *American Journal of Sociology*, 78, 1360-80.
- Guest, T. (2007). *Second Lives*. NY: Random House.
- Habermas, J. (1989). (Thomas Burger & Frederick Lawrence, Trans.). *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*. Cambridge, MA: MIT Press.
- Hut, P. (2008). Virtual Laboratories and Virtual Worlds, in Dynamical Evolution of Dense Stellar Systems. In E. Vesperini, M. Gierz & A. Sills (Eds.), *Dynamic Evolution of Dense Stellar Systems: Proceedings of the 246<sup>th</sup> Symposium of the International Astrological Union Held in Capri, Italy September 5-9, 2007*. Cambridge: Cambridge University Press. (See <http://arxiv.org/abs/0712.1655>.)
- Ikegami, E. (1999). Democracy in an Age of Cyber-Financial Globalization: Time, Space, and Embeddedness from an Asian Perspective. *Social Research*, 66, 887–914.
- . (2000). A Sociological Theory of Publics: Identity and Culture as Emergent Properties in Networks. *Social Research*, 67, 989–1029.
- . (2004, August). *Civility as the Grammar of Weak-Ties Social Interactions: A Historical Prelude to Cultural Citizenship*. Paper presented at the Annual Meeting of American Sociological Association.
- . (2005a). *Bonds of Civility: Aesthetic Networks and the Political Origins of Japanese Culture*. Cambridge, UK: Cambridge University Press: 2005a.
- . Bringing Culture into Macrostructural Analysis in Historical Sociology: Some Epistemological Considerations. *Poetics*, 33, 15–31.
- Ludlow, P. & Wallace, M.. (2007). *The Second Life Herald: The Virtual Tabloid that Witnessed the Dawn of the Metaverse*. Cambridge, MA: MIT Press.
- Meadows, M. S. (2008). *I, Avatar: The Culture and Consequences of Having a Second Life*. Peachpit.
- Putnam, R. D. (1992). *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, NJ: Princeton University Press.

———. (2000). *Bowling Alone: The Collapse and Revival of American Community*. NY: Simon & Schuster.