Acquisitions for Creativity: 'Produsage' in the Metaverse

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Abstract. In this text I will attempt to delineate my thoughts on how virtual economies impact creative output in online virtual builder's worlds, particularly by examining their relationship to the principles of 'produsage', a term coined by Axel Bruns to describe creative, collaborative, and ad hoc engagement with content in user-led electronic online spaces. While this process can be observed in all types of artistic metaverse output, I am particularly focused upon how it may come into effect whilst creating novel representations of 'self' and identity through the avatar. After a survey of the context and the terms related to my inquiry, I will present an example of it by recounting my observations on how the output of my virtual fashion store alpha.tribe is utilized and transformed by my customers whilst pursuing their own creative endeavors.

Keywords: Avatar, Creativity, Metaverse, Produsage, Representation, Second Life, Virtual Economy.

1 Context

The following is founded upon my experiences as a metaverse content creator, observing the impact of my own output, situated against a background of virtual economy. I will endeavor to explicate on this subject by making an example of the merchandise of my virtual fashion enterprise 'alpha.tribe' in Second Life® during the latter part of this text. I will also supplement my inquiry with virtual photographs, scattered throughout the paper, which I believe will contribute more to my discussion than my words themselves may accomplish. These images have been created by alpha.tribe's customers; and they are relevant to my study since in them the artists use my initial output as components of their own creative output. In order to proceed however, a survey of the framework and concepts related to my quest are in order, and therefore the first part of this text has been set aside to these.

1.1 Creativity in the Metaverse

Metaverse are collective, online, persistent, three dimensional virtual worlds, in which (unlike their gaming counterparts) all content is user-created. Thus, a further name by which these worlds can appropriately be called as well is the term 'builders' worlds.'

Although in their current embodiment metaverse rely heavily upon their three dimensional attributes, the concept of a builders' world in which participants could create their personal artifacts goes back to the 1980s when 'Habitat' was launched on

Commodore, even some years before Neal Stephenson had coined the term 'metaverse' itself in his novel Snow Crash. Better known early versions of the genre however are 'Active Worlds' and 'There,' introduced in 1995 in 1998 respectively. Both of these three dimensional domains attempted to provide building tools for users so that they could create additional content to what was inherently provided by the game developers themselves.

Fig 1. Virtual photography by Eirela Lane: "Quand je te voy seule assise...", Second Life, 2010 (left); and Fae Varriale/Michele Leek: "The Storystones", Second Life, 2010 (right).

Following this lineage Second Life, the first truly viable metaverse which was based upon a technological infrastructure robust enough to enable building activity to commence in the fullest sense of the term, was launched in 2003. One of the major reasons that Second Life succeeded where its forerunners had failed was the usage of a system of simple building blocks specifically designed for human-scale creation, bringing about a design principle which the creators of Second Life call 'atomistic construction.' These primitive objects constitute the atoms of Second Life and can be endlessly combined to build structures, and indeed behaviors through the scripts which can be embedded inside them. They are designed to support maximum creativity while still being simple enough for everyone to play with and use, in other words 'small pieces, loosely joined'[1] to create complex constructs of all descriptions, for a plethora purposes, indeed often carrying multiple purposes all at once.

What is also significant is that all metaverse objects exist in a physically simulated world, therefore resulting in fairly predictable behaviors. Such simulation allows new residents to attain an intuitive understanding of how things operate within the virtual world in which they are now immersed by juxtaposing their real world experiences with the novel ones which they encounter upon entering the metaverse. [1]

However, no matter how much the building tools may be impressive in and of themselves, Linden Lab's dream of bringing about a world with a thriving population of builders, enmeshed in a fully operational virtual economy, would still not have materialized were it not for the intellectual property[2] rights with which the developers

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[1] http://www.smallpieces.com/index.php

[2] Within virtual worlds there is a noteworthy distinction from ownership in Real Life in that digital artifacts can only be intellectual property rather than 'real' property.

have enhanced the creative system. Indeed Second Life's decision to grant intellectual property rights to content creators are the foremost key to understanding the innovation and economic growth which the world has brought forth.

Creativity as a way of life. A most important attribute of builders' worlds is the circumstance that not only is their content user-defined and created, but also the purpose of residing in these worlds is entirely up to and decided upon by their users. The developers of the platform provide no narrative which is to be followed, there are no system defined goals or quests.

As a resident of nigh on five years my personal conclusion is that this also poses one of the built-in challenges to the system. While much has been said about the complexity of the interface as being a factor which accounts for the significant fall-out rate of new users, it is my conviction an even greater deterrent is that the 'magic feeling (of having) nowhere to go[3]' proves to be too irksome for most of those who decide to discontinue their sojourn in the metaverse, and usually very early on at that.

I wish to posit that the only good reason to stay in the metaverse is to become creatively active, that unless one does so no amount of shopping, chat and disco dancing, and maybe not even the romantic liaisons and camaraderie of metaverse existence may provide sufficient incentive for logging back in. In this sense the metaverse can, and should be seen first and foremost as a fascinating experiment in collaborative as well as individual creativity.

However, this creative activity may need to be defined through novel terms, since the long-held ones may no longer be sufficient to explain the engagement which many full time residents of the metaverse demonstrate: While a relatively small percentage of content creators will work 'from scratch' (by creating all of their three dimensional building components and scripts, as well as creating and then importing each and every texture and animation that is needed for their work), a far greater number will take advantage of the affordances of the metaverse's economy and acquire building components from elsewhere, thus utilizing the output of others to realize their own creative contributions – which in their turn may well be transferred onto others, thus bringing about a seemingly endless chain of creative collaboration in which the previous link in the chain acts as a passive collaborator, a state which comes about quite naturally through manipulations of his/her initial output by the new owner.

My own creative work falls very much under this second category: Rarely, if ever, do I create every component of my output when I am working in the metaverse. My finished products, which are a combination of what I make myself and what I buy, find their way into the inventories of others, from where they will be used in a myriad ways – as building components of their own work, as props for their virtual photographs and machinima, as inspirations for their story-telling and play sessions; and what is the most important for me – in the creation of their own representations, their virtual persona - their avatar(s).

In most cases, the new owner of my artifact will proceed in the same manner as I described above – by combining my work with their own work or with the work of others. What comes about can potentially be interpreted as a novel implementation of the famed Surrealist 'cadavre exquis,' albeit one that is spread over time, and one in which the novel additions are built through one another, rather than as a continuation

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[3] The Beatles, Abbey Road, 'You never give me your money'. 1969

of one from the other. There is a remarkably enriched new examination of this process based upon electronically and telematically enabled creative collaboration, defined as 'produsage' by Axel Bruns. This new term and its implications to virtual creativity will therefore be delved into in the following sub-section.

1.2 Produsage

The terms 'produsage' and 'produser' bring together the words 'producer' and 'user' into novel hybrid configurations which describe the creative undertakings of collaborative, electronically based communities where the productive act takes place in a networked, participatory environment which breaks down the traditional boundaries between producers and consumers and instead enables all participants to be users as well as producers of information, artifacts and knowledge - frequently in the hybrid role of 'produser' where usage is necessarily also productive. In such building spaces the distinctions between producers and users of content have faded into comparative insignificance. Users are also producers of the shared knowledge base - they have therefore become produsers who do not engage in a traditional form of content production, but are instead involved in 'produsage' - the collaborative and continuous building and extending of existing content in the pursuit of further improvement.
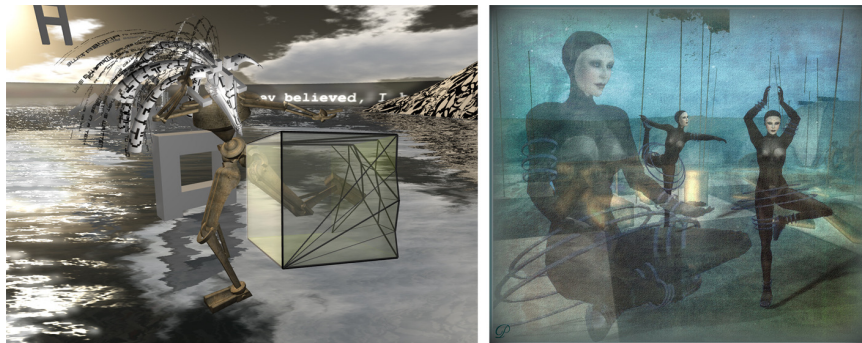

Fig 2. Virtual photography by Eupalinos Ugajin: "LPDT2", Second Life, 2010 (left); and Pixie Tungl/Mandy Mackie "Learning to Breathe", Second Life, 2010 (right).

Hence, the two most intrinsic properties of produsage can be described as follows: That the output is community-based and that within this community the roles of creator/user remain fluid and interchangeable at all times [2].
Intellectual Property. Bruns emphasizes that engagement with content which is in a continuous process of evolution and development also requires new approaches to intellectual property rights. These he advocates to move towards a middle ground between the current strict legislation, and (on the opposite end) a full release of such content into the public domain: While a strict enforcement of intellectual ownership rights will tend to stifle the ability of later produsers to build on the work of their predecessors, for produsers to give up their legal and moral rights to be recognized and acknowledged as the creators of their intellectual property would also turn out to

be counterproductive, since one of the main motivations remains as the ability to be seen as a distinct contributor to distributed produsage efforts [3].

The Unfinished Artifact. One of the most compelling points which Bruns raises however is related to the notion of the 'unfinished artifact' as the output of produsage: Given that the work involved in produsage entails a constant back and forth between the participants, such output is bound in a continuous process of transformation and improvement. Bruns explicates upon this by quoting Brian Eno, who in his 1995 landmark Wired magazine interview urged his readers to *"think of cultural products, or art works, or the people who use them even, as being unfinished. Permanently unfinished. We come from a cultural heritage that says things have a 'nature,' and that this nature is fixed and describable. We find more and more that this idea is insupportable - the 'nature' of something is not by any means singular, and depends on where and when you find it, and what you want it for. The functional identity of things is a product of our interaction with them."* [4]

Fig 3. Virtual photography by Corinne J. Helendale: "Return", Second Life, 2010.

While the physical world which is comprised of atoms (that can be worked upon only up to a certain point after which they start to break down) is not conducive to such extended manipulations of physical objects; the electronic environment with its building blocks of bits provides fertile ground for the existence of creations whose inherent nature is to remain in a perpetual state of being worked upon: Unlike atoms, bits remain malleable throughout their lifespan; and even though the lifespan of the bits themselves may be finite, the lifespan of the artifact itself can be infinitely extended by making novel copies of it. The way in which the boundlessly malleable nature of bits affects creative activity has already been noted upon by Michael Heim during the 1980s, when he wrote on 'thought processing', which describes a novel process of creative interaction between author and output that rests upon an ever-present, ever-evolving exchange and flux, bringing forth a process which need not necessarily ever be terminated [5]. The outcomes are creative systems which, unlike their physical counterparts, can be endlessly improvised upon, altered, re-worked and

played with; and as such they appear to provide the constitutional material of all produsage.

Produsage and Real Life Economic Systems. From this it follows that produsage oriented behavior poses significant, indeed insurmountable incompatibilities when placed in juxtaposition to physical production systems due to the atom based nature of Real Life economic artifacts. Nonetheless, futurist Alvin Toffler had foreseen that significant changes to production systems were imminent in the physical realm as well, when he coined the term 'prosumer' in as early as the 1970s [6]. Toffler pointed at the emergence of a novel group of informed consumers who would demand far greater individuation as well as considerable customizability from their purchases, which indicated a major shift from mass industrial production to a model of on-demand production of items that are essentially custom-made. Despite its interest however, the concept of the 'prosumer' cannot provide the requisite framework for produsage which is an electronic phenomenon reliant upon bits rather than atoms for its consummation in the physical world.

It is therefore additionally interesting to note that whilst physical economies appear to be incapable of sustaining such heightened levels of collaborative engagement due to the innately resistant nature of their materials, not all economies fall under this restriction: Virtual economies do carry the essential conditions for such undertakings and of these the economies of three dimensional virtual worlds possess the additional fascination of being resplendent with artifacts which are simulations of Real Life objects that, just like their physical counterparts, are bought and sold on a competitive market which is based upon supply and demand.

1.3 Metaverse Economy

One of the clearest overviews of virtual economies that I have encountered comes from the first chapter of Edward Castranova's book 'Exodus to the Virtual World' [7]. Here Castranova writes on how these economies carry the potentiality of being highly impactful upon Real Life economic policies, especially through the principle of 'fun' which is embedded into their very being. Through this attribute, Castranova says, the physical world's economy may be likely to suffer loss to a degree which may bring forth a re-examination of its basic economic models vis a vis an impending mass exodus from the physical to the virtual realm and its markets. Although Castranova speaks about virtual economies as a whole, which naturally also includes the vast markets of gaming worlds and their gold based exchange systems, he does set aside considerable space for the metaverse economic model as well, by narrating the business ventures of a hypothetical avatar in Second Life. Through this story Castranova lays out a cogent description of the entire process through which metaverse economies operate.

At this juncture I would like to add that, unlike gaming worlds which reside upon built-in objectives which then in their turn breed economic activity as their by-product, it seems to me that the metaverse is a model which rests primarily upon its economy, since it is the economy itself which brings forth the proliferation of virtual goods which inspire even further creativity. And, as already mentioned above, for me, it is this creative activity that defines the overall raison d'être of the metaverse. As a point in case: As of yet, the OpenSimulator project, and its extension the Hypergrid,

suffer from the lack of the lively market, which to my mind is one of the biggest, if not indeed only, remaining attraction of Second Life. For such a market to come into being in the OpenSim an economic system complete with its own currency, as well as a native system/interface by means of which the virtual income can be converted into Real Life currency is of the essence. Admittedly, this is very much in the nature of a chicken and egg proposition: Unless a critical mass of players joins the OpenSim there will be no incentive for businesses to set themselves up and eventually force the developers of the project to initiate an economic system. Conversely however, the lack of a strong marketplace is in my observation one of the biggest reasons as to why the OpenSim, despite the vastly cheaper land prices and despite its rapidly developing technical infrastructure, still only has a very small population to date.

Fig 4. Virtual photography by harborgalaxy/Deborah Lombardo: "Barbee O", Second Life, 2011 (left); and Nur Moo: "Untitled", Second Life, 2010 (right).

Coming back to Second Life however we see that, despite the difficulties which the world seems to be facing when it comes to recruiting new residents, the economic metrics are nonetheless still noteworthy in their robustness: In the third quarter of 2011, there was an average of 475.000 monthly economic participants, playing with a L$ supply that was the equivalent of 29.3 million USD. The LindeX volume (the currency exchange service of Linden Labs) remained steady at 30 million USD; and web based sales, which are transacted over a dedicated website maintained by Linden Labs came in at just under 1.2 million USD[4]. When it comes to this last metric it has to also be pointed out that in-world sales will have been much higher: As the owner of several stores both in-world, as well as Second Life's web based marketplace[5], my personal assessment is that only about one out of five items which are sold actually get sold over this website. Talking about this with fellow merchants I have found that what applies to my business also applies to their businesses in equal measure.

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[4] http://community.secondlife.com/t5/Featured-News/The-Second-Life-Economy-in-Q3-2011/ba-p/1166705

[5] https://marketplace.secondlife.com/?lang=en-US

My thoughts as to how in many cases this merchandise (mine as well as that of the other content creators who contribute to the economy of the metaverse) is likely to be transformed and integrated to novel output once it has changed hands, will be the subject matter of the following section.

2 Exemplifying metaverse produsage: alpha.tribe

The fashion enterprise 'alpha.tribe' was the outcome of a personal research project of mine which was based upon the examination of multiple identities and the 'splitting up of the creative self' [8]. What started out as a personal investigation (observing a system of multiple avatars of my own creation who were embroiled in collaborative creative activity), in time developed into a fashion store which today sells well over 100 items, which are situated in a shop that is built upon a dedicated metaverse island which is the extension of the playful and idiosyncratic nature of the business itself.

The merchandise consist almost entirely out of unisex avatar costume packages, complete with skin, garments and three dimensional body attachments for both sexes - all of which can be copied and modified infinitely by the customer. However, as is the practice of most other metaverse merchants also, the bought items are non-transferable, and can therefore only be utilized for personal usage.
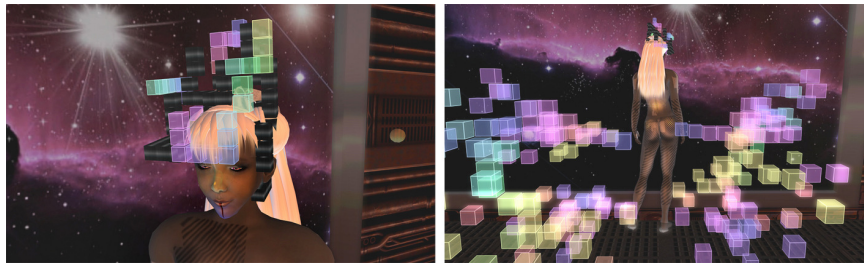

Fig 5. Virtual photographic series by Grady Echegaray/Mark Grady: "I can feel them. They are coming again. Sweeping in over the shoulder of Orion", Second Life, 2009.

The business has a follower group which currently stands at 369 avatars. When I decided to write this text I sent out a questionnaire about how my customers used my creations. The following paragraphs are mostly a condensation of their responses, as well as a few insights of my own.

With only one exception what has emerged from the answers which I received is that individuals who buy alpha.tribe apparel will do so for their own creative purposes; that they will use the items that I sell to them as a part of their own artistic projects. It has to also be noted that their output will only rarely involve further building activity; in most cases it seems that my customers are photographers and machinima artists who make usage of their purchases within the context of such projects. Using alpha.tribe merchandise as an inspiration for story-telling, creative writing and blogging appears to be yet another popular pursuit. Indeed, the images by Grady Echegaray shown in Figure 5 have been created for just such a purpose, as the visual material on which the author based a work of creative writing.

Almost all of the responses stated that the actual purchase was the source of inspiration for the ensuing artwork. This feedback is significant in that it answers a tricky part of this inquiry: It may well be asked what the difference between taking a photograph in Real Life whilst wearing purchased items and doing so inside a virtual world might be. The answer, I believe, resides in the very artificiality of the virtual environment in which everything that you see around you has been 'made' by humans. Thus, while our Real Life bodies and persona can be modified to a certain extent, how we are represented inside a virtual world is dependent solely upon the quirks of our own creativity and imagination. It is my long-held conviction that one of the most important manifestations of creative behavior in virtual worlds is the creation of the 'self' itself, and that the representation(s) of this 'self' are artworks in their own right. Given that what is sold in my store is avatar apparel, the answers stating that the purchase of the item had triggered an artistic inspiration leads me to hope that my output may have contributed to this complex process which, amongst much else, involves complete identification between the physical person behind the keyboard and the pixelated, albeit three dimensionally embodied, being on the screen.

That such identification coming about through a process of 'produsage' may indeed be in the offering was made especially apparent to me in one of the answers which I received to a query about intellectual property (which unsurprisingly remains a contentious issue for which solutions, such as the one that Axel Bruns has proposed, urgently need to be formulated). The responding avatar told me that while she would be happy to credit content creators for their artistic, architectural or environmental efforts whenever she uses these as part of her photographic work, she is reluctant to do so when it comes to avatar apparel, and particularly avatar skins, since *"the skin has been changed by my inhabiting it. It is no longer as it was when I purchased it. To acknowledge the creator in this context would be to make me a puppet. However were I using this same skin on a model I would be happy to acknowledge it."*

Finally, as was clearly stated in almost all of the answers which I received, and as is also very evident in the virtual photographs with which I have supplemented my text, rarely will a metaverse artist use only the output of one other content creator. What happens instead is that the output of several creators is assembled into novel original output - a mashup. Sometimes this happens by using metaverse artifacts only and sometimes by putting together metaverse generated content with images or footage harvested from elsewhere. What emerges is a cadavre exquis, a conceptually complex assemblage, which not only involves the artifacts used themselves, but also extends into investigations of identity and the representation of the 'self'.

3 Conclusion

I would like to conclude this text by quoting the well known blogger Michael Cervieri who wrote in 2007 that the metaverse is *"a wildly provocative experiment in user generated content. Unlike most 'upload your content and we'll share it in some sort of social media web-2-point-oh way,' content creation in Second Life is really, really, difficult."* [9] Notwithstanding this admittedly difficult learning curve, countless individuals – some of them professional artists and designers, others amateurs who may even have discovered their creative potential through the very virtual world itself – are enthusiastically taking part in this creative experiment. Not the least of these

difficulties of content creation goes to the core of defining a purpose and an identity within, what is after all, a vastly novel experience for humanity – extending one's existence through a pixelated, three dimensionally embodied persona.

Since this is such a novel aspect of being I believe that the exact nature of its creative output; the properties which set it apart from creative endeavor involving other media and, even more importantly, other states of being and embodiment is yet to be fully understood and theorized upon. I also believe that Axel Bruns' concept of 'produsage,' with its emphasis upon the 'unfinished artifact' and the fluidity and interchangeability of the roles of 'producer' and 'user,' particularly when viewed in conjunction with metaverse economy, will go a long way in understanding some of the decisive aspects of this process.

Acknowledgments

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