ABSTRACT

This paper discusses the creation of typographic systems as artworks in three dimensional online builder's worlds, also known as the metaverse. An installation based upon text will be presented as an exemplar that will attempt to delineate the playful approach that has been taken whilst constructing a typographic art ecology that can be traversed and experienced through the agency of avatars.

The focus is upon how such screen-based virtual three dimensional spaces may utilize text within a context that departs from the primary attribute with which writing has inherently been associated – namely the display of informational content. In such environments semantics may be displaced through the usage of text as a playful device, displayed as artifacts that are riddle-like configurations, or constructs that are meant to be understood through means other than straightforward reading; bringing about states of heightened engagement and ‘play’ through their manipulation or indeed simply by being immersed inside them. The awareness that providing a means for straightforward reading might not be an appropriate goal in this regard lead to a search for sources that would address a need for play, for personal readings and interpretations; in other words, text that is meant to be ‘felt’ as an artwork, rather than to be ‘read’ as informational content.

Keywords: 3D, Art, Avatar, Concrete Poetry, Constrained Writing, Play, Text, Typography, Virtual Worlds, Virtual Reality.

1. VIRTUAL WORLDS, VIRTUAL REALITY, PLAY AND TEXT

Metaverse are three dimensional, collective, online worlds in which (unlike their gaming counterparts) all content is user-created. A further name by which these worlds can be called is the term ‘builders’ worlds,’ since an important attribute of these spaces is 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 these platforms provide no narrative that is to be followed, and there are no system defined goals or quests. Instead, metaverse residents are expected to formulate the raison d’être for their virtual sojourn out of a self motivated inquiry. From this it may follow that one of the most widely embraced reasons to stay in the metaverse is to be creatively active: These worlds possess attributes that are grounded in creative endeavor to the point where the best developed of them to date, namely Second Life®, has been defined as “a wildly provocative experiment in user generated content.”[1]

An important note is that this vast assemblage of user generated content can be seen to provide the constituent elements of an elaborate system of ‘play.’ This has been remarked upon and discussed by Brown and Bell, who researched play and sociability in online virtual worlds through an examination of ‘There,’ a collaborative virtual world that can be seen as the partial precursor of the metaverse. Their findings point at strong ties between sociability, objects and play states; saying that play and sociability rely upon a number of interactional ‘building blocks’ for their satisfactory fruition. While talk, topic and identity all work together to make ‘play’ possible, an equally essential element is the interaction that comes about through objects. [2]

As already said, it seems that one of the most compelling reasons to stay in the metaverse is creative activity. This comes about at all levels of skill and ambition, ranging from the building of personal homesteads to wild avatar dress up
games, and from the creation of complex role play environments to sophisticated artworks that can demonstrate high levels of both conceptual and technical aptitude. Possibly one of the most widespread creative pursuits however is virtual photography and machinima through which metaverse residents create their own unique displays which take their trajectories from the interpretations of the works of others. Thus, most metaverse builders with foresight conduct their activities with an awareness that their undertakings are very likely to provide the base material for further artistic investigations that will come about as virtual photographs and videos which use their initial output as costumes and props, or as the stage/scenery upon which which this second order creative output unfolds.

In my 7 years in the metaverse I have engaged in many of the creative activities listed above, particularly as a builder of virtual art ecologies, complete with geography and climate; and as a fashion designer for avatars. In many of my projects typography has held a center-stage position – which is of no surprise, since as a graphic designer I have had a life-long love relationship with the visual display of semantic material. It was therefore a foregone conclusion that I would carry my fascination with typography into my creative explorations in virtual three dimensionality as well – albeit, embedded into an altogether different format than the intrinsic one that holds typography as an informational device through which the content of the written word is to be unequivocally and eloquently expressed. What I have chosen to do instead is to place type and text as frivolous, oftentimes seemingly nonsensical, game objects into my constructions. The following are some of the deliberations and inspirations through which I contextualize text and typography as playful artifacts in the metaverse, leading into a brief discussion of a recent work that was built under these precepts.

1.1 Virtual Three Dimensionality and Text

In her book 'The Visible Word: Experimental Typography and Modern Art, 1909–1923' Johanna Drucker offers a model for the materiality of visual-linguistic signs that looks forward into the future through what she calls the "nearly proto-electronic and cybernetic sensibility of F. T. Marinetti," who seems to have heralded what Richard Lanham has called "the complete renegotiation of the alphabet/icon ratio inherent in desktop publishing." [3] This extends itself to the same questions of subjectivity that are problematized by virtual reality. Insofar as it brings "visual presence" to meet "literary absence," this notion of materiality is supported by a theoretical model which contains certain internal and irresolvable contradictions: Johanna Drucker notes that the typographically rendered page is an image while at the same time it is also language. Furthermore the reader is also a voyeur, a viewer, or a 'screener.' These simultaneities operate equally for the production of visual pattern and semantics – both are integral to signification, and both inform Drucker's "materiality of interpretation," which is a potent model for a digital visual poetics, whose object is not merely 'text' – and especially never so when the text comes about as a conglomeration of three-dimensional typographical objects in the quadri-dimensional hermeneutic space of an electronic visual simulation. [4]

Following up on Drucker's thoughts on three typographic dimensional displays, Brian Lennon notes that because virtual reality technologies offer the most radically manipulable operations on visual experience, they will be central to a digital visual poetics. With these operations come problematizations of subjectivity and agency that, according to Lennon, will literally enact the 'postmodern problem.' VR, says Lennon, is the material problem of the postmodern, the machine that came along to test our prophesied disappearance into the Great Simulacrum. "The putative demise of textuality is presently accompanied by a flourishing of poetry and text-based art that takes for granted not only its own dynamic, kinetic, virtual, and interactive visuality, but also a real, material, bodily human 'interactor,' materializing as a poetics that draws by necessity on an entire century's worth of language art and visual poetry, while at the same time formulating ways to read and to look at, to 'screen,' the new and seemingly newly ephemeral artifact of the electronic visual poem," [5]which, amongst many other forms of expression, may also manifest three dimensionally on a two dimensional screen.

Rita Raley calls for a new type of reading, a 'deep reading' that incorporates a new type of analysis which acknowledges the semantic significance of spatial design; what she calls the "spatial turn" of digital writing – an extension of poetic space into the third dimension. Raley argues that those multi-dimensional works that integrate the z-axis into their repertoire require a fundamental reorientation of spatial perspective and new critical frameworks for their analysis. A fourth type of reading becomes necessary, volumetric reading along the z-axis, "reading surface to depth and back again. The unit of poetic analysis has shrunk from line to word to letter and now we have need of another unit," which she calls "the three-dimensional projecting plane." [6]
The screen is redefined by the addition a temporal dimension, as well as a third dimension which brings to the fore a simulation of depth whereby novel spatio-temporal parameters become possible. On the screen, through the addition of spatial depth, foreground and background relations can be constructed, letters can be superimposed upon others, distance and proximity can be simulated. Writing becomes volumetric: letters can suddenly be viewed from all sides, they can be rotated and turned around their own axis like real objects in space.

A usage of typography for artistic purposes in virtual three dimensional has its precedents in artworks such as Jeffrey Shaw’s ‘Legible City’ from 1989, [7] in which the work was accessed through a stationary bicycle that was physically placed inside a virtual reality environment; and by riding of which the viewer could navigate a city constructed out of type. Further examples of art projects in which the textual component have been made prominent in virtual three dimensional are also works such as ‘Screen: Bodily Interaction with Text in Immersive VR’ by Carroll and associates from 2003, [8] or ‘Cave Writing’ by Sascha Becker and her co-authors. [9] The commonality between all of these works is that immersion is achieved through the corporeal body of the viewer who is directly placed inside a physical virtual reality environment such as a CAVE, or other such hardware systems which enable perception that is simulated to very close resemble Real Life interaction with tangible objects.

However, when it comes to screen based viewing in which a three dimensional environment is displayed on a flat surface, working with text has noteworthy issues that are related to legibility: The Virtual Shakespeare Project placed the entire text of ‘A Midsummer Night’s Dream,’ to be traversed and read inside a three dimensional environment that was displayed on a two dimensional screen. As such, the project is possibly one of the most noteworthy experiments conducted in this area, especially when it comes to working with large amounts of text. The project was developed during the mid-1990s, jointly between IBM and the MIT Media Lab; and has been deliberated upon extensively by one of its collaborators, David Small, who starts his discussion of the project by saying that "by escaping the confines of the flat sheet of paper, we can arrange information into meaningful landscapes that exhibit qualities of mystery, continuity, and visual delight," [10]

To test the efficacy and of screen-based three dimensional typography, the team developed a method of displaying typographic forms at any size, position, and orientation in three-dimensional space. A virtual camera was then moved through the space, exploring the information that inhabited the space. By adapting and expanding on techniques developed for two-dimensional graphic design to the mostly unexplored realm of three dimensional design, a series of visual experiments were produced. As a result of these experiments Small has drawn attention to a number of design issues, that are the outcome of the fact that traditionally letters have been designed to be viewed directly on a flat two dimensional surface. When it comes to screen-based three dimensionality however, we are faced with the challenge that there are countless numbers of uncontrollable viewpoints, through which a continuous perspective distortion that is less than ideal for reading is created. Thus, it is not always possible to guarantee the angle of the view relative to the angle of the text and one cannot be certain of maintaining the integrity of the letterform in screen based three dimensional environments: Each new angle will result in a differently shaped letter and at extreme angles the image can even be reduced to a line. Furthermore, when the camera moves behind the text, what is to be read looks reversed as though seen in a mirror. While certain word shapes can still be recognized in less than ideal circumstances, in general there are few viewpoints from which text holds its legibility.

A further issue in terms of legibility also addresses size: “A graphic designer can use size differences to visually distinguish certain elements in a text. In a three dimensional space however, you cannot always resolve the relative size of two objects. If one object appears smaller in the picture plane, it could actually be smaller, or it could be the same size and farther away, or it could even be much larger and very far away. So, in the design of an information space, one must be careful about using size as a differentiating variable.” [11]

Small’s findings from the Virtual Shakespeare Project lead to the conclusion that attempting to engage in creative activity involving text as informational content in a screen-based three dimensional environment is not an easy option. Equally compelling however is an understanding of the metaverse as a playful environment that resides upon tenets which are closely related to make-belief, indeed to absurdity, to the solving of puzzles. All of these considerations have impelled a need for a textual strategy that may fulfill the demands of ‘play,’ make room for personal readings and
interpretations: Text that is meant to be ‘felt’ as ‘play’/artwork, rather than to be ‘read’ as informational content. This has led to an examination of concrete poetry, especially as it relates to digital poetry.

2. SHAPE POETRY

Concrete poetry, also sometimes referred to as visual poetry or shape poetry, is a literary artifact in which visual attributes are as (if not indeed sometimes more) important as the semantic content delivered in the plain text itself. This prominence is achieved through giving typographical arrangements a major role in conveying the intended effect, often bypassing the meaning of words, of rhythm, and rhyme and so on. Concerns with space and surface are deemed to be major features of concrete poetry – it is through these that the relationships between linguistic elements and their spatial interactions gain structural and meaningful significance.

In 1953, the Swiss poet Eugen Gomringer published a collection of his works, each only one word in length, on which he proclaimed that it was the actual positioning of the word on the page that was of more importance than the meaning of the word itself. Although he had no knowledge of Gomringer's work, in that same year in Sweden, Oyvind Fahlstrom wrote a Concrete Poetry Manifesto in which Gomringer's notions were closely reflected. Simultaneously and similarly oblivious to the new style emerging in Europe, a group of Brazilian poets, the Noigrandres, were experimenting with poetry as a visual medium, using the object form of the ideogram and would later name this style Poesia Concreta. It was thus a time of great co-incidence, given the contemporaneous experiments with structure and form in the fields of music and painting, and the recurring use of the word ‘concrete.’ More than that, however, it signaled a global desire to progress beyond traditional linear representation and start manipulating the very substances out of which art is made.

The concept at the heart of it all – the word as visual image – was far from new and it was not the concrete poets who were the first to have articulated it, but the Italian Futurists. In 1916 F.T. Marinetti and his comrades foretold the downfall of the book in their manifesto “The Futurist Cinema” from 1916 when they envisaged that “Filmed Words-In-Freedom in Movement (synoptic tables of lyric values – dramas of humanized or animated letters – orthographic dramas – typographical dramas – geometric dramas – numeric sensibility, etc.).” [13] Similarly, in the early 20th century, Guillaume Apollinaire constructed complex visual collages from letters, words and phrases in his famed Calligrammes, exploring spatial relationships and offering multiple non-linear readings of the text through typographic manipulations. And even earlier, the optical poems of the Baroque period made visual forms from lines of text which even harbored interactive elements – such as a wedding poem from 1637 whose lines take the form of a drinking goblet that requires the reader to turn either the paper or their head around in order to follow the text, evoking a physical sensation of having drunk a goblet of wine.

According to Rebecca Sharp, concrete poetry by necessity involves a reduction of language. Since emotions and ideas are not physical materials, it is language itself that is dismantled in terms of form, design and function. Significant also is the new relation to space; no longer an impotent backdrop against which text must rigidly stand, the new writing breaks out onto the entire surface of the page, allowing the reader/viewer to form personal patterns and make new, independent inferences. “In so undermining the security between word and page, concrete poetry also dislocated word from meaning and furthermore, destabilized the traditional relationship between the text and the reader.” [14]

Thus, as is also the case in the historic example of the wine goblet mentioned above, one of the most significant features of concrete poetry is that in order for meaning to be communicated, the reader must actively engage in the text by deciphering its layout and typography, by interpreting its shapes and spaces, viewing the work as an object and thereby playing an active role in its creation – to acknowledge what Gomringer called the presence of a visio-linguistic “Eigenwelt” in which concrete poems are no longer “about something, but instead are autonomous realities in themselves.” [15]

2.1 From Concrete to Digital

While Gomringer's visio-linguistic 'Eigenwelt' was at the core of the work and the musings of pre-digital era concrete poets, the advent of computation added unforeseen opportunities which were integrated as almost a natural continuation
of a tradition that had its origins in neo avant-garde experimentation. Friedrich W. Block sees contemporary digital poetry as an extension of avant-garde and concrete poetry, pointing out that almost all vital concerns of digital poetry – such as the spatio-visual arrangement of text, multilinearity, and indeed even movement and interactivity – can be traced back to its historical predecessors in which these were as much key concerns as they are in digital poetry. [16]

The usage of computers for the generation of poetry came about in the late 1950s in Stuttgart, spearheaded by the likes of concrete philosopher/poets Max Bense and Eugen Gomringer. Bense describes “aesthetic states of texts as defined by their degree of unexpected, surprising and non-trivial occurrence of words” [17] – a notion which, given Bense's preoccupations with Cybernetics, can also be seen as a relocation of Claude E. Shannon’s definition of information as 'unexpected, unpredictable news' into the realms of poetic aesthetics.

Lori Emerson says that digital poetry attempts to exploit the medium of the word to represent our desire of a full experience through language as a form of life – in the case of digital poetics this also comes about through movement, generation, interactivity. Through such means digital poets are able to express visually the life-like qualities of words. What is fundamental in the perceptual shift brought on by the digital is that the digital realm offers us the opportunity to conceive of space in different or expanded terms than that of paper-based writing; and, further, this sense of space requires that we come up with a different set of terms for the interpretation of certain digital texts. [18]

Especially compelling, when considered in relationship to digital poetry that has been generated in a virtual world where such displays are lived and experienced through avatars, Emerson also quotes Steven Wallace who has said – at a time much before the onset of virtually embodied lives – that the subject matter of poetry is not that “collection of solid, static objects extended in space but the life that is lived in the scene that it composes. Reality is not that external scene but the life that is lived in it, is things as they are. The word proliferates its special senses within such lived-in-realities. It is a jungle in itself.” [19]

The question to ask then, is how we are to anticipate meaning when a poem is based upon a conception of space as a “multiple, variable, and vibrant,” plane; one where the literal ground is ever shifting and heterogeneous? Or, put in another way, what if the milieu upon which the poem is built is not, as Brian Rotman puts it, “an ideal realm, untouched by change, independent of energy and matter, beyond the confines and necessities of space and time,” [20] but instead materializes as a mathematically determined, artificially fluid space – as an online virtual builder's world inherently is – in persistent flux, both through the very nature of the frenetic building activity therein; and as importantly, through the further artistic appropriations of consumer-avatars who joyously engage in manipulations of existent artworks, creating self-perpetuating chains of transformative creative activity.

3. CONSTRAINED PLAY: 5555555 55555 555

The project that provides an example to this discussion came about when artist/curator avatar Giovanna Cerise invited me to contribute to her collaborative Second Life project revolving around numbers. The framework set by Cerise was that participants were asked to pick a number between 0 and 9 and everything that was to be built had to be made out of that single digit. Given my preoccupation with typography in three dimensional spaces that is fed by my interest in concrete poetry, I gave a most enthusiastic 'yes' as a response to Cerise's invite and built an architecture made only out of 5s which was exhibited as part of her show in Second Life in the Fall of 2013, sponsored by the Linden Endowment for the Arts.

What was especially appealing about Cerise's brief was the constraint that it placed upon the builder since an easy correspondence for it can be found in constrained writing, a technique which binds the writer by some condition that forbids certain things or imposes a pattern. Constrained writing can be said to contain a sense of play as is evidenced in works such as 'Gadsby,' an English-language novel consisting of 50,100 words, none of which contain the letter 'e'; the 2004 French novel 'Le Train de Nulle Part' by Michel Thaler which was written entirely without verbs; or Christian Bök's 'Eunoia' – a univocalic poetic treatise that uses only one vowel in each of its five chapters. Oulipo – a French literary group dedicated to the practice – defines the term as “the seeking of new structures and patterns which may be used by writers in any way they enjoy.” [21] Constraints, within this context, are used as a means for triggering ideas
and inspiration, most notable amongst them being Georges Perec's 'story-making machines/devices,' as well as techniques such as lipograms, palindromes, and restrictions based upon mathematical formulae.

My professional specialization as a graphic designer is layout. Accordingly, the space that I built might be called a three dimensional magazine spread of sorts, complete with body text, subheadings and headlines. I wondered if text composed of a single glyph would still give a sense of 'content' when placed in such a way, in a logic that followed the typographic hierarchies of a standard page layout. In order to make this conglomeration of 5s resemble as closely as it could to a text that is comprised of real words, I replaced all the letters of a lengthy piece of writing with the glyph 5, using the 'find and replace' feature of a standard word processing software. Headlines and subheads were generated in similar fashion, and these, together with the body text, became the components of an architecture that came about through a constraint. The typographic hierarchy was achieved by placing the body text on planes and by building the heading and the subheadings as three dimensional 5s that were clustered together to form words, around which the body text walls of the architecture were grouped – very much in the manner that a layout designer arranges elements of text on a page by using techniques such as negative space, clustering, proximity and directional axes. These 'pages' were then set at right angles to each other to form the rooms of a building that could be inhabited and played in by avatars.

However, the project took on a life of its own after I completed the building, when I started to think about how avatars would behave if they could only talk through a text which was strung out of 5s. What sort of a world would that be? Would a restraint like this provoke a far more visual type of communication since equal-valued strings (equal size, weight, placement, etc) of a single glyph would not suffice to express what one wished to bring across? Would, in other words, concrete poetry emerge out of such a limitation? Would text inevitably become a deconstructed artifact whose visual attributes compensated for its semantic absences if our utterances were to be placed under such a constraint?

To investigate I sent three members of my coterie of avatars into the architecture and situated them in an encounter where their exchanges had to be decipherable (even if what they actually said was not) in order for a tangible storyline to develop. The tale is very simple: A lonesome avatar appropriates a strange world where one can only talk in 5s. But then she gets company – which, at first, she rejects since she does not want to share what she holds to be solely her own. But then she is talked into playing with the incomers. Has a good time. However, just at the height of the fun and games "they" turn around and go. Leaving her bereft.

Although 5555555 55555 555 was initiated as an architecture that could be immersively experienced in a virtual world, it evolved into a project of many parts for which 'frozen moments in time' of the original three dimensional manifestation were taken back to the two dimensional desktop, where they were further manipulated through image
editing software as well as other applications: I took many virtual photographs of this storyline to which I added two dimensional speech bubbles (made out of strings of 5 to resemble words) as a further layer. These textual snippets were deconstructed in such a way that they would express some sort of 'emotion' – to make up for the circumstance that conveying actual 'meaning' was beyond their capabilities. Out of these typographically enhanced screenshots were made several displays of the tale since an important part of the playful experiment was to see whether I could narrate the same events through different means: A storyboard made with an online infinite grid, a virtual flipbook and a 2.5D application that lets viewers follow the tale through a zooming user interface in which some scant clues regarding the progression of events are also provided. And when it comes to future work, to investigate the audible manifestation of it all, I am planning on making a stop motion video made out of the screenshots which will be combined with sound poetry made solely out of articulations of 5s by the three actor avatars.

Figure 2: “5555555 55555 555: Alone”. Elif Ayiter, Second Life, 2013.

Figure 3: “5555555 55555 555: Territorial”. Elif Ayiter, Second Life, 2013.

While the architecture that gave me the original impetus can still be visited in Second Life, it has to be acknowledged that my interest in 5555555 55555 555 has transitioned from three dimensionality to the flat surface of the screen,
materializing as an ongoing online project – what can be called a simulation of a simulation – viewable through a custom website where its components are still actively being collected at the writing of this text\(^1\).

### 4. THE 'CONCRETE' AVATAR

An alluring aspect of all digital output is the surprise moment which very often accompanies the creative process, especially when chance is deployed as a tool to “transgress the subjective powers of imagination, to go beyond the producer’s limits of comprehension in an attempt to arrive at results which transcend both cultural, psychological and intellectual boundaries.” [22] This hybrid between poem and play evokes the oft-cited game state that Eugen Gomringer has defined as another important feature of concrete poetry. “The constellation,” Gomringer writes, “is an offer of a fixed set of parameters, within which the reader is asked to take up the ball that the poet threw and to playfully create meaning by combining and relating the given elements in a creative fashion.” [23]

![Figure 4: “555555 55555 555: Gone”. Elif Ayiter, Second Life, 2013.](image)

In conclusion I would like to reflect upon the circumstance that in 'taking up the ball that the poet threw' in the creative climate of a three dimensional virtual world, it is I, as much as others – if not indeed more so – who becomes a part of the game of chance encounters: This involvement, as both participant and artist, is effectuated through the avatar who is a being that resides outside of us as much as it does within us. Looking closely at this existential split, Jacquelyn Ford Morie suggests that there has been a recent paradigm shift in human experience which has been brought on by the phenomenon of the avatar. Morie points at the research of performance artists that contributes to the exploration of virtual environments as a key to our future understanding of ourselves in physical and digital domains, which takes on “an experiential locus that is outside the perceptual self.” This, according to Morie, signifies “a shift to a dualistic existence that occurs in two simultaneous bodies through which the lived body has now bifurcated and become two.” [24]

It seems to me that all creative practitioners, regardless of whether they may be operating in a virtual environment where their being is evinced through their avatars or in the physical realm where they act solely through their material bodies, 'play' with their work – both during its production as well as after its completion. When it comes to concrete poetry this state of play that shapes meaning out of non-semantic artifacts is commented upon by many practitioners of the genre, including Christian Bök who says that this state “almost fulfills the dream of Deleuze, who imagines an ideal game of chance, one whose rules are themselves subject repeatedly to chance, resulting in an aimless outcome so futile that we have no choice but to dismiss the game as a nonsensical dissipation of time itself.” However, Bök takes the

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\(^1\) Project website: http://five5five5five5.blogspot.com/
notion of chance altogether beyond nonsense when he further quotes Deleuze who tells us that “if one tries to play this game other than in thought, nothing happens, and if one tries to produce a result other than the work of art, nothing is produced.” [25]

When it comes to avatars this 'game played in thought' can be taken to surprising dimensions, especially when the game is effected by multiple avatars through which a single human being can manifest in a virtual world. In the case of three such entities of my own deivation picked up Gomringer's poetic ball, to rework a simulation into a tale of 'selves' which is based upon constrained writing that is attempted to be playfully thwarted by the machinations of concrete poetry through which feeling (if not meaning) is hoped to be displayed. What heightens the state of play, and consequently that of creativity, is that all three player/performers are also 'me' – they are in fact nothing but 'me, myself and I,' engaged in chance encounters whereby 'we' all move from three dimensionality to two dimensionality, from strings of a single glyph to their re-arrangement into emotive speech bubbles that issue forth from our mouths.

It may well be that the brief period that came to the fore during the first decade of the century, and in which avatars and virtual worlds were seen as the next big step in the human journey, where all professions and endeavors were predicted to be effectuated through virtual agents, has now passed. I would however like to make a case that the potency of avatars as the novel performers of well established artistic practices, such as is also the case with concrete poetry, should not be dismissed out of hand. My own (almost decade-long) intimacy with them convinces me that avatars are intrinsically playful beings whose raison d'être may not easily lend itself to activities that do not incorporate elements of gamesomeness. It also has to be recognized that the handing of avatars – from simply getting them to move expressively, to their customization – requires considerable patience and the acquisition of specialized skills. Therefore, the process of fusion between human and avatar is a long and arduous one. Added should also be that the metaverse software itself is not easy to learn. All of these make for a steep learning curve which is not likely to raise the enthusiasm of large bodies of users as would have been needed for the mass exodus into virtual worlds that was predicted only a few years ago.

These drawbacks having been acknowledged, observations of the startlingly prolific creative activity that one is surrounded by on entering the metaverse, as well as my personal satisfaction from engaging in it, nevertheless lead me to contemplate whether virtual worlds and avatars may not yet find a place of artistic significance, even if their presence as the stages and enactors of every day human pursuits may no longer be in wide consideration.

REFERENCES