More than Human: Merging real and virtual states of being from arts and culture to wellness in a post-Covid world

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Since the onset of Covid in tandem with major advances in computational culture, AI and machine learning, and sociocultural movements around diversity, equity and inclusion, the move to digital life has been rapidly accelerating causing a transformational change in the art world. From museums and galleries to the rise of digital art and artists, the changes wrought by the pandemic tied to political turmoil are causing a reshuffling of what was the cultural milieu, to a new cultural landscape that is at once global, multicultural, and human-centred.

Covid-19 pandemic. Digital art. Digital culture. States of being. Virtual Reality

1. BACKGROUND

Now heading into the third year of Covid, in 2022, with no end in sight, major shifts to human patterns of life elicited by a radical change in human communication, interaction, education, and the arts have required humans to adapt to the digital world in ways and at a speed unanticipated pre-pandemic (Bowen & Giannini 2021; Giannini & Bowen 2021; 2022). The fast-forward pace of Artificial Intelligence (AI), neural networks, and related platforms, increasingly impacts human freedom and identity (Bowen et al. 2021), while our identity continues to evolve as if synchronised to the life of the virus, we call Covid.

Having little choice, we retreat into digital life (Giannini & Bowen 2016), characterised by isolation, loneliness, and depression, the new normal that we are unconsciously adopting while we seem no longer sure of what it means to be human – our states of being (Bowen et al. 2018) eroding, caught in the crosshairs of our battle to exist, against all odds. Thinking from past to present, reflecting on human states of being in such a highly dynamic yet gloomy environment, this paper focuses on the emergence of new trends in museums and digital art/culture (Giannini & Bowen 2019a; 2019b) that evoke human emotions inspired by connections with nature, identity and psychological states of mind and wellness that find their precursors in late 19th-century and early 20th-century art and music. Arriving now at this auspicious moment in digital time and space, we observe how Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR) are creating new opportunities for emotional and immersive experiences between real and virtual states that attest to the human spirit of creativity and invention as if seeing digital light in a tunnel of darkness, leading to new ways of being more than human, while connecting with both artificial and natural states of being and ways of healing the body and soul.

2. MERGING THE REAL AND THE VIRTUAL

Digital identity, light and colour has captured the art world, seen in the rising presence and public engagement with Vincent van Gogh (1853–1890) and Claude Monet (1840–1926) immersive experience exhibitions leading the way to a new art destination, where audiences connect to impressionist and post-impressionist art aesthetics invoking a magical sense of nature and colour wrapped in deep human emotion of the inner self-revealing the conscious and unconscious mind, a trend mirroring the French impressionist poets in the likes of Arthur Rimbaud (1854–1891) and Stéphane Mallarmé (1842–1898), who in turn directly...
influenced the father of impressionism in music, Claude Debussy (1862–1918), his musical language of chromaticism, and his going beyond western music to the sounds of the Javanese gamelan which he heard at the Universal Exhibition in Paris, 1889, foretold the embrace of non-western musical language as it set the stage for 20th-century new music.

Thus, we bridge from the late 19th century and the pandemic of 1918, the year Debussy dies on 25 March, and World War One ends on 11 November, to the present, in a world dominated by the pandemic amid radical sociocultural transformational change, especially seen in the rise of digital art, the popularity of new digital exhibition venues and the broad acceptance of artificial life as our journey into unchartered territory continues, where human and artificial life evolve alongside Covid.

**Life in the Abstract (by T. Giannini)**

Life in the abstract
No contact
No fact
Just fiction
Covid
pushes us apart
Sadness of the heart

Nothing seems real
Can’t feel
your gaze
out of sight
in the haze
of digital light

No hand to hold
as life unfolds
Stories untold
of suffering and sadness
Just Covid madness

Imagining the future
Close your eyes
Visualise
the beauty of nature
Monet’s landscapes
Debussy’s soundscapes

Escape from Covid
Escape from grief
What’s left
but the belief
in art and emotion
A powerful potion
for wellness and love

More than human
states of being
Seeing

Munch – The Scream
Rousseau – The Dream
Emotion in art
States of the mind
And the heart

**Figure 1:** L’après-midi d’un faune by Stéphane Mallarmé, 1876, 1st edition, illustration, Édouard Manet. [https://gallica.bnf.fr/ark:/12148/btv1b8625643g/f11.item](https://gallica.bnf.fr/ark:/12148/btv1b8625643g/f11.item)

**Figure 2:** La Seine à Port-Villez by Claude Monet, 1894, the same year of Debussy’s Faune. Monet captures the colour palette of Debussy’s Faune, featuring the sound of the flute in blues and pinks. [https://commons.wikimedia.org/wiki/File:Monet-seine-rouen.jpg](https://commons.wikimedia.org/wiki/File:Monet-seine-rouen.jpg)

**Figure 3:** Prélude à l’après-midi d’un faune, by Claude Debussy, 1894, autograph music manuscript, flute solo, measures 1–4, composed after the poem of that title by Stéphane Mallarmé, 1876. Bibliothèque Nationale de France, DépartementMusique, MS-17685. [https://gallica.bnf.fr/ark:/12148/btv1b55001035h/f9.item.r=debussy%20faune%20midi%20faune](https://gallica.bnf.fr/ark:/12148/btv1b55001035h/f9.item.r=debussy%20faune%20faune)
The portrait of Stéphane Mallarmé (1842–1898), the French symbolist poet and critic, associates a group of painters, poets, and composers who embody the pinnacle of French 19th and early 20th-century art (see Figures 1–4). All artists whose close relationships and shared passion making art produced works that continue to delight, astonish and inspire the human spirit around the globe, and especially now, as we find ourselves in the midst of a pandemic experiencing deep emotions across a wide spectrum of feelings, from grief, loneliness, separation to unexpected moments of joy and creativity.

The publication of Mallarmé’s book-length poem \textit{L’après-midi d’un faune} in 1876 enjoys sensational success owing to its sensuality, subject matter and beauty of word-sound. 18 years later in 1894, Claude Debussy (see Figures 5 and 6) writes one of the most influential compositions of the 20th century – \textit{Prélude à l’après-midi d’un faune}. And, in the same year, Claude Monet invites Paul Cézanne (1839–1906) and his other artist friends, Mary Cassatt (1844–1926), Pierre-Auguste Renoir (1841–1919), and Auguste Rodin (1840–1917), to his home in Giverny.

From Gustave Courbet’s (1819–1877) portrait of the great French poet Charles Baudelaire (1821–1867) in 1849, Édouard Manet’s (1832–1883) painting of Stéphane Mallarmé in 1876, to Debussy’s 1894 \textit{Faune}, the same year that Claude Monet invites his circle of artists to Giverny, these artists and poets devote themselves to speaking for artistic freedom and individual identity. Their shared passion is foundational to the strong relationships shared between impressionist and symbolist artists, poets, and composers. Debussy’s \textit{La Mer} ("The Sea", three symphonic sketches), composed during 1903–5 and completed at the Grand Hotel on the English Channel, introduces non-western elements in music. Debussy chooses Hokusai’s \textit{The Great Wave} for the cover page of the score’s first edition (see Figure 7), showing his predilection for Japonisme in art.
With *La Mer*, Debussy’s new musical language creates a revolution in music – from his 24-tone chromaticism and integration of non-Western elements, he invokes new ways of expressing the sea through the lens of human emotion, colour, and cultural cross-pollination.

### 3. MENTAL STATES OF BEING

The self-portrait of Edvard Munch (1863–1944) painted during the Spanish flu (see Figure 8) draws on elements of *The Scream* (see Figure 9), especially Munch’s facial expression depicting despair and pending doom while the waviness and colours of the landscape take on the emotions of the human scream. In essence, when we experience intense emotional disturbance – everything looks different and somewhat distorted. This version, executed in 1910 in tempera on cardboard, is the same year Henri Rousseau (1844–1910) paints *The Dream* (see Figure 10) in the last year of his life. Seeming to be in sharp contrast to one another, *The Scream* and *The Dream* rather represent two extreme points of human states of being – from inner despair to ethereal delight.

*Figure 8: Self-portrait of Edvard Munch during the Spanish flu, 1919, National Museum of Art, Architecture and Design, Oslo, Norway.*

*https://commons.wikimedia.org/wiki/File:Edvard_Munch_-_Self_Portrait_with_the_Spanish_Flu_(1919).jpg*

Rousseau paints what looks like a virtual dream world, a tropical jungle scene created from his imagination (see Figure 10). From the lens of contemporary states of being, living in a world where reality and virtuality intermingle (Bowen et al. 2021), we are challenged in our understanding of the self, as identity flows between imagination, interpretation and emotion. For Van Gogh, nature and art seem to be the arbiter of this polarity. As human digital behaviour evolves more rapidly than ever, under the weight of the pandemic and advances in computing and technology, more time is spent in virtual worlds and digital activity. Have we lost control over our environment and existence?

*Figure 9: The Scream by Edvard Munch, 1910.*

*https://commons.wikimedia.org/wiki/File:Edvard_Munch_-_The_Scream,_1910_(Munch_Museum).jpg*

*Figure 10: The Dream by Henri Rousseau, 1910.*

*An imaginary place, both idyllic and scary, with wild animals hiding in the jungle.*

*https://commons.wikimedia.org/wiki/File:Edvard_Munch_-_The_Scream_-_Google_Art_Project.jpg*

During the year that Van Gogh is hospitalised at Saint-Rémy, he produces some 150 paintings. His states of being swing from elation about his highly productive year to depression, being in a fragile mental state and under medical care at the asylum, at the Hospital Saint-Paul in Saint-Rémy-de-Provence (see Figure 11). In Spring 1890, he falls into deep despair leading him to attempt suicide by shooting himself; death follows.
Van Gogh spends a year from May 1889 to May 1890 undergoing psychiatric treatment at the asylum of the Hospital Saint-Paul (see Figure 11). His highly unstable emotional state and mood swings trigger a mental breakdown – but despite this, during his time at the asylum, he remains highly productive.

Departing from Saint-Rémy-de-Provence because he wishes to be closer to his family, he moves to the northwest Paris suburb of Auvers-sur-Oise, a community of artists, where he dies on 20 July 1890, aged 37. His iconic painting, The Starry Night, now seen around the world in Van Gogh Immersive Experience Exhibitions, is painted in June 1889, so a few weeks after he is hospitalised, and provides a stark example of how much we still need to understand about human states of being.

During Vincent’s final months of his life in Auvers-sur-Oise, he makes new friends and throws himself into painting. Yet after a visit to his brother, Theo, Vincent grows very concerned about his financial future. This uncertainty becomes too much to bear on top of his illness. In an 1890 letter to Theo, shortly before his death, he tries to express in words his “sadness, extreme loneliness” but can only do so through his paintings of “wheatfields under turbulent skies.”

“… once back here I set to work again the brush however almost falling from my hands – and knowing clearly what I wanted I’ve painted another three large canvases since then. They’re immense stretches of wheatfields under turbulent skies, and I made a point of trying to express sadness, extreme loneliness. You’ll see this soon, I hope – for I hope to bring them to you in Paris as soon as possible, since I’d almost believe that these canvases will tell you what I can’t say in words, what I consider healthy and fortifying about the countryside.” (Van Gogh 1890)

The painting, poetry and music of these French artists resonate more than ever with today’s American artists and audiences, and, as if by plan, the great symbolist poet, Arthur Rimbaud (1854–1891), dies in Marseilles, the year after Vincent’s death, also at the age of 37. They seemed to live in parallel time, both producing revolutionary visions about life and art, and breaking free from long-held social norms to achieve their artistic purposes. Rimbaud writes in his most influential work of 1873, Une saison en enfer, “J’ai assis la Beauté sur mes genoux – Et je l’ai trouvée amère” (I placed beauty on my lap, and I found her bitter). These oft-quoted words of Rimbaud symbolise a move away from idealised “beauty” to nature, the mind, and senses.

From impressionism and symbolism to abstract art and digital art, we experience a paradigm shift from 18th-century realism to nature imagined through emotional states of being, and digital light as a key interpretive force. This is evident in immersive experiences based on Van Gogh and Monet, while Debussy brings colour, light and nature to music, as he replaces traditional tonality with a new chromaticism heard in Faune, in the sound of the flute playing the opening measures, marked soft, sweet, and expressive (piano, doux, et expressif) – Voilà! Modernism in music is revealed in a whisper (see Figure 3),

4. IMMERSIVE EXPERIENCE, VR AND NFTS

When Van Gogh, the Immersive Experience bursts into the contemporary consciousness of the art world and the public, the notion of the immersive experience takes centre-stage. This leads to a renewed awareness of the power of immersive experiences in the digital arts to lift our spirits, evoke emotions, and transform our states of being, especially during the bleakness of the pandemic. It is as if Van Gogh is speaking to us, telling his story about human identity and states of consciousness (Bowen et al. 2019).

Denés Ruzsa (born 1982) is a Hungarian filmmaker and digital artist. Using digital light, colour, imagination, and emotion, he depicts the natural world from a planetary and biosphere perspective reflecting his dedication to Earth’s climate and atmosphere (see Figure 12). Although the tools and mode of expression change with digital art, the themes of nature and human aesthetics (Bowen et al. 2017) persist in the 21st century. Digital art crosses all boundaries, from representational to abstract, and across all digital media. And now with VR, AR, and MR, digital artists are inspired by new digital tools that are empowering creativity.
In this age of computational culture, human digital behaviour and computing become integrated into human identity (Bowen et al. 2020) and entrenched as part of human existence, the human body and mind. This is most understood through digital art and artists – where art expresses human feeling, emotions, and senses – the digital and physical human states of being (Bowen et al. 2018) fuse into one, with embedded devices that act as extensions of human physical and mental powers mirrored in digital states, most recently in NFTs (Non-Fungible Tokens).

The artist, David Cronenberg, a filmmaker who explores intersections between humans and technology, says, “Technology is an extension of our bodies.” (Yerebakan 2021) creates his first NFT about his own death that captures the reality of death in a fantastical virtual moment entitled The Death of David Cronenberg. (SuperRare 2022). Not surprisingly, Mark Zuckerberg of Facebook, recently subsumed as “Meta”, adopts this idea as a key facet of the metaverse (Frenkel et al. 2022), where humans will need to feel comfortable wearing digital devices such as smartwatches and VR headsets. There are certainly opportunities to present art in new animated and 3D ways (Davis 2021).

5. WELLNESS AND DIGITAL THERAPEUTICS

Figure 13 presents a larger-than-life exhibition of a vaccine needle, evoking the nightmare and anxiety of millions, as the Covid vaccine, like it or not, plays a part in the life of every human on planet earth. Figure 14 allows us to visualise the New York City subway system in the blue glow of “medical measures in public places,” ultraviolet light that can kill the Covid virus. Figure 15 shows an NYC subway vending machine under blue light – don’t leave without your PPE (Personal Protective Equipment)! And for those with a sense of humour, one might say that these subway settings could have been inspired by Van Gogh’s The Starry Night blue glowing sky.
Doctors are using home-based virtual therapeutics and leveraging VR to improve mental health at scale with home-based treatments. Dr Brennan Spiegel, who works on the frontlines of Covid-19, is using VR for immersive therapeutics with excellent outcomes to treat anxiety, depression, and suicidal thoughts. Results of some 5,000 studies are especially revealing, showing that VR for home treatment, and for the visualisation of nature and its aesthetics, create what doctors are calling a “healing” environment (Spiegel 2020).

Covid – Stop stalking me (by T. Gianninni)

Living with Covid
Can’t see you
but know you’re there
Stalking me
Everywhere
In despair
Wearing my mask
Avoiding life
Not knowing
when you’ll strike

Mugged by Covid
Can I win this fight
Take flight
Hide
Don’t go out
Shout – shout – shout

Seek stability
Feel tranquillity
The patterns of life
Repetition
Routine
But what lies ahead
unknown, unseen

6. ART, MEDICINE AND DIGITAL TECHNOLOGY

Immersive therapeutics conceptually tie to the goals of immersive Van Gogh and Monet exhibitions and touch upon deep psychological states of human identity (Bowen et al. 2018). Van Gogh’s vision of nature meets those goals and goes beyond to express the emotional turmoil that millions of people are experiencing during Covid.

The last year of Van Gogh’s life was at once highly productive and fraught with emotional swings. A study by two biological scientists, at the University of Portsmouth, shows that “recreational use of VR can successfully alleviate the negative impact of lockdown periods on the population’s mental and physical wellbeing,” a key finding with positive implications for using VR as a treatment for wellbeing during Covid isolation (Siani & Marley 2021).

7. CONCLUSION

Social VR platforms are becoming increasingly popular among users and, when compared to previous virtual worlds, they have unique immersive technical properties able to elicit intense feelings of presence. Overall, the findings reported here stress the strong association between such feelings of presence and the psychological rewards that users obtain in terms of relatedness, self-expansion, and enjoyment. This is, to the best of our knowledge, the first study providing a quantitative examination of those associations.

Hence, our research points out the important role that immersive VR technology may play in favouring social connectivity and users’ wellbeing in scenarios where other options (e.g., face-to-face contact) are not available. This may refer to periods of social distancing but may also be applicable to other circumstances (e.g., long-distance couples or expat workers). At the same time, our results reveal broad possibilities for social VR platforms to address self-expansion, helping users satisfy those self-related psychological needs that may remain unmet during everyday life. Thus, this study hints at the potential of social virtual reality applications for meeting users’ psychological needs and opens avenues for future research addressing a more in-depth analysis of emerging social VR applications.

Acknowledgements

Jonathan Bowen is grateful to Museophile Limited for financial support.

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