

PART II

THE THEORY OF LIVE VISUALS

Chapter 11 - Presence and Live Visual Performance

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Introduction

This chapter will provide a contextual overview of current discourse in presence studies and offer insight into the subjective experience of Live Visual performance (LVP), predominately from an audience perspective. Presence effects both the physiological and the psychological. Presence as a subject is simultaneously located within measurement-based scientific investigation, subjective artistic exploration and objective/subjective orientated technological studies. Given the blend between the physical and digital interactions now intrinsic to much of Western society, the study of presence is complex and increasingly important. The effects of presence have implications for the ways in which humans work, play and our well-being.

The extent to which our culture, senses and biological limitations effect presence (in which order and which magnitude) is a long-debated subject with a lineage as far back as the 6th Century, and not one we can resolve in this text. Rather the goal of this chapter is to explore what role presence has in LVP, and begin to explore, alongside its practical and commercial uses, what needs might presence fulfil for the audience.

When exploring the nature of presence and LVP, we note that as creative practice LVP can straddle and be situated in different forms such as dance music and/or the avant-garde performing arts, both of which can draw on formal properties of further musical genres and artistic disciplines such as Performance Art, Video, Cinema, Media Art and a host of Design disciplines. For the purposes of the discussion here. I will use a broad definition: contemporary LVP is mediated experience fostered by the intermedial space of merged sound and image, shared during a live, specific time bound, performance that will eventually come to an end.

Section1: Key Definitions

Lombard and Ditton (1997) offered the influential definition of presence as “the perceptual illusion of nonmediation.”¹ The term “perceptual” refers to a continuous, real time response of all the human sensory, cognitive, and affective processing systems that enables perception. They argue that for “presence” to occur, we engage in the “illusion of nonmediation.” Put simply, when an experience where mediation is occurring, we are no longer aware of its effect.

Slater & Usoh,² channelling the poet Coleridge,³ also describe this as a temporary “suspension of disbelief” typically felt when the individual feels that they are in a world other than where their real bodies are located. For Lombard and Ditton other characteristics are also important to note; presence is not a by-product of

perception malfunction (say through psychoactive chemicals), psychosis or a psychiatric hyper-focus: it also requires a facilitation by a human-made medium/technology. These caveats separate out their definition of presence from the field of sociology and psychology which also discuss presence but inclusive of a human to human paradigm.

While many scholars and technologists focus on the fully 'open window' model where any mediating factors have entirely disappeared in the audiences mental processing, within LVP context this is rarely the desired intent, more common is a type of presence where the mediating and merged technologies are overt (i.e. large format digital projection, screens, specialist lighting, sound systems are salient rather than functioning as transparent mediations).

A note on the role of human-made technology

Whilst this chapter will predominately work with Lombard and Ditton's definition, it is also worth a quick note on some foundational principles. Philosophers and psychologists point out that presence is a key part of human consciousness. Platonic-Cartesian philosophy makes the distinction between the world as seen by the eyes on one's head and the world of the mind's eye. The early work of Plato (427 – 347 BC) and Descartes (1596–1650), showed that whilst they diverged with regards to the role of the human 'soul,' together they helped to drive the concept of "objective rationalism," an epistemological view that reason is the chief source (and test) of knowledge. This view endured through to the Enlightenment into today's general culture: that our experiences are always mediated by our sensory and perceptual systems. The human biological infrastructure is naturalised (at least for those who can afford to take our bodies for granted) to such an extent it no longer is foregrounded in our consciousness. Within LVP the audience has this intrinsic biological mediation, and potentially in the other mediums mediating the LVP environment such as normal assistive technologies like eyeglasses or hearing aids, or more enhanced material additions such as 3D glasses (Figure 11.1). We may refer to these factors in relation to the discussion but will primarily frame its explorations around the audience's experience of mediation and Lombard and Ditton's foundational definition of "the perceptual illusion of nonmediation" and the key role of additional human made digital technology within that experience.



Figure 11.1– Novak Collective’s 3D Disco is an interesting example of audience being offered additional mediation via cardboard diffraction glasses to future influence their perception of the LVP¹. Image credit: Novak Collective. Used by permission.

Lombard and Ditton’s Categorisations

Alongside their influential definition of the notion of presence, Lombard and Ditton also offer a comprehensive review of the common conceptualisations or characteristics of presence. These are: presence as a form of social richness; as realism; as transportation; as immersion and as a social actor. They start with presence as ‘social richness’ whereby the experience of presence is normally a focus/concern in large organizational contexts, this type of presence creates a sense of satisfaction through interpersonal (person to person) intimacy and immediacy. For example, a water cooler or kitchen kettle could be envisaged as mediums-for-presence within a generic large office block context, as objects these facilitates a change in human to human proximity, eye-contact, intimacy of conversation topic etc. Within LVP the coming together in the evening for a live performance, also symbolises a change of context in which interpersonal dynamics and normal individuality dissolves through the crowd structure.

A second conceptualization of presence is one that remains key in the entertainment, science and military industries – presence as ‘realism.’ This concerns how well the medium/technology can produce compellingly accurate representations of objects, events, and people. Reality and screen-mediated presence as a scholarly subject has its origins in what was termed the broadcast or network Era. From the 1950’s onwards the prevalence of the household medium of the television increased and in turn became a contested site for audiences to access

key public information, ideas and potentially 'unreal' thus socially harmful representations of reality. The concern about the insidious effects of false realities is now writ large through the high levels of contemporary social engagement through social media networks,^{4 5} a network set up to offer transparency through a shared insight into other peoples' lives.

Marvin Minsky, co-founder of the Massachusetts Institute of Technology's AI laboratory, helped drive and define televisual presence. In his 1980's article *Telepresence*, he denotes the quality of illusion of realism whilst introducing the term telepresence, which "emphasizes the importance of high-quality sensory feedback and suggests future instruments that will feel and work so much like our own hands that we won't notice any significant difference."⁶ Later studies showed that the scale of the screen and the definition of the image and quality of the audio also influence the success of the "sensation of realism."⁷ Recent developments in Ultra-High-Definition Televisions also sit alongside a growth in home cinema and projection technologies, all of which further extend opportunities for improved sensations allowing content makers (motion pictures, television, video games), to develop detailed computational simulations and sophisticated material with the goal of increasing viewer immersion at home. This will inevitably contribute further to concerns over the conflation of represented reality and how to parse that which is "of nature"⁸ and not an artificial construction. This concern around the extent to which human-made technologies become normalised or invisible in their influence has been an ongoing concern of media theorists and scholars of embodiment and contemporary aesthetics and culture. Outside of the continuous increase and quality of image and sound in video conferencing enabled by better bandwidth, the Covid 19 global pandemic⁹ has further accelerated the growth in web conferencing systems and helped through necessity to foster forms of "virtual togetherness,"¹⁰ suggesting that societies may be moving towards a point in time when the screen eventually dissipates in our perception as we have over time similarly learned to ignore the body as a mediating factor.¹¹

There has also been renewed interest in the potential of presence in Virtual Reality (VR), exemplified by the social media giant Facebook's acquisition of the developer Oculus VR in 2014. Facebook has mass consumer reach as well as funding for research and development. The commercial promise of VR is built on the aspirational ideology of "if you can dream it, VR can make it."¹² VR has a similar trajectory to television, but unlike TV and its complicated relationship to communicating/influencing social reality, VR is associated with a certain utopian escapism, correlating with belief that society wants to escape from the chores of

modernity. This can be charted as far back as the 1980's to Minsky's belief that telepresence will free humans from "hazardous and unpleasant tasks,"¹³ Haraway's "dream of the hope for a monstrous world without gender,"¹⁴ or Murray's notion at computational narratives will better reshape "the spectrum of narrative expression."¹⁵ Another interesting difference to note is that TV screen technology has endured, whereas public interest and funding of VR had significantly shuttered mid 1990's, when the chasm between public expectations for the technology and the reality of limitations were too wide (Figure 11.2). This was not helped by a public whose interests were also being diverted by the emergence of the internet.



Figure 11.2 – A page from a Virtuality gaming system marketing piece showing the visette and controller from 1994. CC Share Alike version 4.0.

Alongside presence as social richness and as realism, Lombard and Ditton cite another key conceptualization of presence, and one that has deep roots in human culture and storytelling. This is the ability of presence to be 'transportive' the artificial sense of being 'here' and taken 'there/somewhere.' This has become a common and desirable phenomenon and can be achieved in low sensory/bandwidth mediums such as in books or oral storytelling.¹⁶ Rheingold

described this kind of presence/telepresence a “form of out-of-the-body experience.”¹⁷ For Lombard and Ditton transportive presence is related to human-made technology rather than through linguistics or language.

In VR, the medium of putting on goggles, gloves and eyeglasses to simultaneously go nowhere yet be transported anywhere, has become so pervasive it’s intrinsic to the medium. However, outside of science and perhaps military applications of VR, social realism is not normally part of the design. The user’s expectations for imagined, fantastic and escapist content still endures from VR’s formative years.

Lombard and Ditton also discuss presence as immersion, an experience when the senses become led by or dominated by the technology to such an extent that other senses are stopped or impaired. Csikszentmihalyi’s (1975) concept of ‘flow,’¹⁸ is a state of being when one is completely absorbed in an activity, especially seen in activities which involves your creative abilities. Csikszentmihalyi notes that often for an individual being in this state is a route to experiencing satisfaction or happiness. Other scholars such as Palmer¹⁹ and Quarrick²⁰ have characterised the psychological immersion as occurring when their users felt ‘absorbed’ and ‘involved’ in the a given task.

As discussed previously in Chapter 10, within LVPs participants’ experience a pull in terms of attention either between sound and visuals, or the synthesis of forms in an intermedial space. Biocca²¹ uses the vocabulary “sensory bandwidth” to describe the different cognitive demands different technologies or environments make on the subject. For each sensory channel, stimuli from the physical environment compete with stimuli from the virtual environment for the attention of the individual. Biocca goes on to define this as sensory saturation defined as “the percentage of the sensory channel occupied by stimuli (information) from the virtual as opposed to the physical environment.”²² With these statements in mind, given the explicit marriage of audio and visual in a fixed durational performance (that cannot be paused or rewind), it is reasonable to describe the form as medium-high bandwidth experience. This is also dependent on the complexity of re-contextualising the audio and visual material as an additional layer, and if there is any requirement to create any formal ‘meaning’ understanding from the material.

Presence can also be regarded as a ‘social actor’ within a medium. Lombard and Ditton cite Horton and Wohl²³ who coined the term ‘para-social interaction’ when describing television presenters and their ability to offer a compelling illusion of real-time communicative interaction for the purposes of fostering false intimacy

with their viewers. In such para-social instances, users' perceptions and the resulting psychological processes lead them to illogically overlook the mediated or even artificial nature of an entity and attempt to humanise and seek out interaction with the non-human. Digital 'social actors' (who are programmed to enable false intimacies) now come in many forms, automated retail assistants, avatars, voice only entities and smart toys for children. These sit upon insights that many people also have come to humanize their computers or smart phones, all of which speaks to changes in technology and human vulnerabilities. Set within contemporary context of increased mixing of realities, this trend is also a concern for social psychologists, sociologists and human computer interaction scholars who note both positive effects but also deleterious impacts of socialisation and technology, which increasingly now has a defining role in our private lives.²⁴

It is possible that the nature of the audio-visual content can partially feel like a human 'character' within the performance. The content can be portrayed as a 'being,' images can be rendered as figurative, audio can be lyrical, which in turn can help to foster feelings of para-social intimacy. Depending on the lighting, visual design and representational content the performer may feel integrated into the visual composition to such an extent that their living self can be captured via a live camera feed and fed into the library of media being shared in the live performance. Alternatively, the performer can feel separated and discrete, more akin to an 'entity' rather than an 'identity' on stage (see front cover), a feeling perhaps reinforced if there is also a volume of surrounding computational hardware. If the performer herself/himself includes their voice/image via live capture and are re-screened as part of the audio-visual performance, this could encourage audience 'empathic observation' which is the act of "watching facial expressions and body language in human exchanges to figure out what is going on."²⁵ McConachie and Hart point out that this is not the same as reading the body as a sign. "It is a mode of cognitive engagement involving mirror neurons in the mind/brain that allow spectators to replicate emotions of a performer's physical state without experiencing that physical state directly."²⁶

Furthermore, the artist could also engineer within her/his live performance "autopoiesis,"²⁷ a state in which the audience is invited to participate in a feedback loop within the live performance. The audience's data can be gathered and then directly affect the proceedings of the performance, an example of this approach can be seen Golan Levin at al.'s *Dialtones (A Telesymphony)*, a performance of choreographed dialling and ringing of the audience's own mobile phones.²⁸ Whilst not explicitly para-social, autopoiesis as a performance concept could feel like one is

participating with a living system along with other humans (the performer, the audience). The orchestration of “emotional intensity”²⁹ of the audience by the performer’s skill in changing the audio-visual content in response to how she/he reads the audience also functions as a connection, a form of intimacy - as the real-time manipulation of their emotions could feel like a direct, personal connection since the individual believes that performer is communicating with them.

Section 2: Culture

We now will consider the key socio-cultural circumstances that also influence human experience. Human culture is socially constructed in fast-changing variable form, often described as the ‘software,’ and society being the ‘hardware,’ taking longer to update or change over.³⁰ For Ratner³¹ culture and psychology are two elements of a larger integrated and interdependent system, alongside biology and personal experience. Capitalism both shapes cultural artifacts and concepts and in turn requires these elements to be put into the service to sustain its economy. Typical cultural socialization processes promote success, status, self-image and the need to develop a market-driven identity. Considering this context Butler posits the need for more personal agency³² and Turkle points out that digital/online culture ostensibly offers an ‘always on’ increased social connectivity but has resulted in a deeper sense of individualisation.³³ For many, contemporary existence in these settings creates a cognitive gap between ourselves and our wellbeing. This distance or gap is often termed the wedge of alienation or “false consciousness,”³⁴ a wedge that can come to inhibit personal happiness or fulfilment. However within LVP contexts, the audience can experience a specific type of interpersonal socialisation and intimacy (social richness), potentially fulfilling a sense of connection missing within other lived experiences.

The ongoing saturation with screens in contemporary culture (and the mediation of relationships through technology) and online / mobile content, increasingly repositions the ‘live’ event as a diametric contrast to these behaviours. The time-bound nature of live experiences makes them a rarefied phenomenon requiring the audience’s attention to focus ‘in the moment’ rather than common distracted, multitasking inattention.

Theatre, dance, and musical performances have traditionally been conceived as primarily passive experiences,³⁵ whilst the performers and audience may be aware of each other and that ‘awareness’ may affect the emotional charge of the proceedings, this is quite different within audio-visual live performance, which

ordinarily require significantly more mental bandwidth to actively observe and participate in what Lusch and Vargo refer to as the "co-creation of value."³⁶

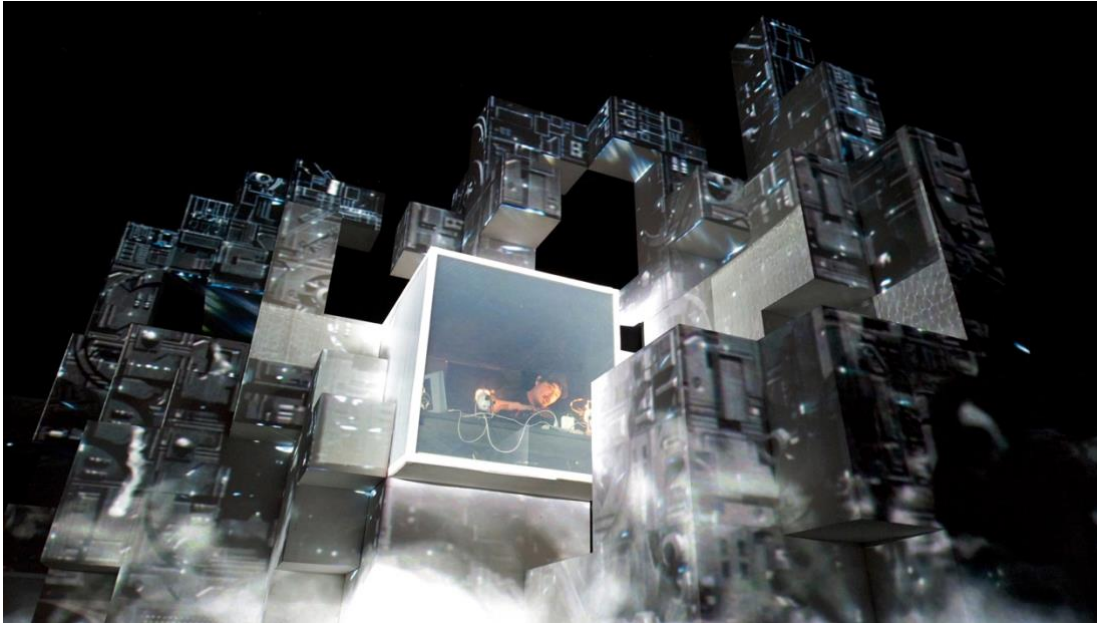


Figure 11.3 – An example of a complex audio-visual performance via space mapping, Amon Tobin's *ISAM* tour 2011, Roundhouse performance. Image credit: Valerio Berdini. Used by permission.

This active participation is part of the knowledge that 'live' experiences are different to the experience of being part of the audience for non-live Arts. Ladbourn et al. describes the nature of 'live-ness' as a shared experience, a performance that "is part of you and you are part of it,"³⁷ and for many the irreversible nature of Live Visual performance is one of the primary drivers in our attention/focus - a form of positive attention, and a variation of Csikszentmihalyi's concept of 'flow' through immersion in creative activities.

Human experience of live performance can also create what Hirschman and Holbrook termed a "hedonic response."³⁸ Santoro and Troilo,³⁹ drawing on the work of Lacher and Mizerski,⁴⁰ define the hedonic response as "a combined response from the emotions, senses, imagination, and intellect" (see Figure 11.4) and argue that "consumers expect . . . [hedonic] products and services to create an absorbing experience arousing their emotions, stimulating a physical reaction, soliciting their memories and fantasies, and triggering their cognitive development." This concept taps directly into importance of engaging an inner life, a term typically understood as non-technological yet virtualized set of intangible experiences such as dreaming, fantasies, daydreaming or "reveries."⁴¹



Figure 11.4 – An example of audience hedonism in action within audio-visual culture. TNGHT performing in San Francisco 20.4.2013. Image credit: Flickr YetiLegs Annika Kinsman CC by 2.0.

Individuals may choose to attend an LVP to experience emotions *and* have their audio-visual intermedia senses stimulated; however, this definition of hedonism is more nuanced than the common simplification of hedonism as a reckless pleasure-seeking activity. Singer, channelling Nozick's *The Experience Machine* from 1974 says that "people that don't aim at pleasure, but aim at something else, some activity that's worthwhile in itself, and they get absorbed in the moment of doing what they're doing... they actually get enjoyment and fulfilment out of it."⁴² This need to be fulfilled in leisure time becomes more vital when work lives become less satisfying within common isolating⁴³ social tendencies of 'Advanced Capitalism.'⁴⁴

Within LVP, activeness of the communicative intersection between performer, performance and the audience is a key defining characteristic. Interestingly, Hirschman and Holbrook note that "If consumers know in advance that hedonic consumption will require a certain level of imaginal participation and emotional expenditure, they may choose to use (or to avoid) a certain product,"⁴⁵ Hirschman and Holbrook flag the importance of audience expectations and the level of informed knowledge before engaging with a hedonic product. Radbourne et al. point out that the better the audience's prior understanding of the Arts event is, the greater the appreciation will be if expectations are met; however, within LVPs many performers will intentionally iterate or improvise during their performance as part of their practice. This fosters a sense of trust or risk taking on the part of the audience.

Hedonic 'products' have also been associated with luxury and the Arts. Hagtvedt and Patrick have discussed a hedonic artwork's ability to create luxury perceptions by referring to the notion that "art is intrinsically tied to a heritage of high culture, with connotations of exclusivity, luxury, and sophistication."⁴⁶ This phenomenon, which in turn based on Veblen's "conspicuous consumption"⁴⁷ is a concept directly borne out of the opportunities manifested for some in the industrialisation age. To enact conspicuous consumption, an individual will purchase, primarily for display purposes, expensive and tasteful commodities.

The notion of commodity self (i.e. that ourselves are constructed in part through our consumption and use of commodities) can also be an element in LVP. Performances and experiences are sold as products, events that have evolved from a free, experimental avant-garde practice, even illegal and underground) into the daylight of mainstream commodity culture. Music clubs, VJs and DJs have become contemporary influencers and tastemakers, and in some instances even brand identities in their own right. Mainstream Live Visual performances can be described as "designed design culture"⁴⁸ showing the power of design (see Chapter 15) and how it moulds with societal issues such as taste and behaviour in a commercial world.

In developed, industrialised societies the audience experience of performative visual arts has become more meaningful, primarily fostered by the prevalence of digital distribution and piracy,⁴⁹ which has had the consequence of demonetizing the ability of new music releases to create money for artists and labels. This in turn has transformed the commercial value placed on the live performance sector, which is now an important way to create a profit. LVP, given its 'live-ness' is a unique ephemeral event, thus is turn creating additional notions of value and worthiness. This has resulted in more mainstream investment and active marketing of live, real-time events. Live tickets are now able to command high prices because of a product's *symbolic* value. The MUTEK arts festival (2000–present), based in Montréal, Canada, regularly features VJs alongside experimental sound art performances. Day passes typically start at £40-£70 and often are purchased as a full weekend event (£80-140). However, a single big 'brand' club night such as Ministry of Sound, London would be priced at £60+ per unit. These tickets are a luxury product, approximately 6 times more than a cinema ticket. It is also common for further costs to be incurred alongside participating in an LVP: for example, travel, accommodation, and refreshments during the performance. The recent Covid-19 pandemic and the temporary sector closure has thrown a spotlight on

both the nature of the appetite to participate⁵⁰ in LVP's and the economic value of 'after dark economy'⁵¹ of which LVP is a key part.

Radbourne (2007) argues that "the new arts consumer is on a quest for self-actualisation where the creative or cultural experience is expected to fulfil a spiritual need that has very little to do with the traditional marketing plan of an arts organisation."⁵² Authenticity is typically associated with reality, truth and believability, yet these qualities mean different things to different individuals; perception matters if an experience is understood to be staged or genuinely authentic, and thus the sense of authenticity varies considerably in LVP attendees. Wang identifies three types of authenticity - objective, constructive and existential authenticity - each of which has implications for the study of value within the performing arts. This last category is particularly pertinent to LVPs.⁵³ Wang explains: "In common sense terms, existential authenticity denotes a special state of being in which one is true to oneself, and acts as a counter dose to the loss of true self in public roles and public spheres in modern Western society."⁵⁴ Participants express that their sense of individual freedom and or acceptance⁵⁵ with LVP in night clubs is one of primary attractors to these events. Value within LVP can thus be considered both as personal value (inner life value to the individual) as well as within a socialising framework, where the public demonstration of the selection and financial investment to attend a live performance, is also an extension of self-identity, and contributes to how ones wishes to be perceived by others.

Social Presence

Social presence refers to the extent to which other beings also exist within the live experience and are understood to affect or react to the audience's individual presence. Whilst the individual sensory conditions, fused with culture and genre-based expectations are the foundations in which presence is created, one of the most distinguishing extra features of LVPs is 'being' within a group. This social presence is incredibly important when considering presence and all its permutations.

Live Visual performances are often offered either as large of mass audience gatherings (see Figure 11.5), or as medium or small conspicuous environments between the artist and the crowd; yet both culturally are understood to be collective experiences. Each type of social space influences the collective experience of non-verbal communication. The ability to exchange eye contact, smiles, vocalisations or being able to explicitly talk with strangers during or afterwards,

provides audience members with value because it "allow[s] private feelings to be jointly expressed and reinforce[s] the sense that we are not alone."⁵⁶



Figure 11.5 – An example of a very large concert crowd. Vasco Ross's 2017 show at Enzo Ferrari Park, Modena, Italy. Image credit: Italian Interior Ministry. CC by 3.0.

The field of social psychology states that crowd behaviour is heavily influenced by the diminished responsibility of the individual and the impression (another temporary illusion) of universality of behaviour, both of which increase with crowd size.⁵⁷ In terms of purpose for existence, LVP audiences can be described as an expressive group – i.e. people gathering for an active purpose and not typically aggressive.⁵⁸ Sociologist Herbert Blumer also pointed out that crowds should be considered as dynamic changing (over time) systems of "emotional intensity."

The nature of groups is also discussed by anthropologist Victor Turner who pointed out atavistic similarities between the "leisure genres of art and entertainment in complex industrial societies and the rituals and myths of archaic, tribal and early agrarian cultures."⁵⁹ Turner coined the notion of 'communitas' which is often cited as useful remedy to experiences of alienation. Communitas is defined as: "unstructured or rudimentarily structure [with] a relatively undifferentiated comitatus, community, or even communion of equal individuals who submit together to the general authority of the ritual elders."⁶⁰ It could be said that the performer(s) within LVP act/symbolise (albeit temporarily) this role of an elder, especially in instances where extra prominence is afforded through a celebrity status - popular culture's deification of an individual. This also potentially feeds back into a sense of rarefication, liveness and commercial value of LVPs. For Turner being in a state of communitas fosters a liberation of human capacities of cognition, affect, volition, and creativity from the normative constraints incumbent upon

occupying a particular social status.⁶¹ Wang (1999) also discusses the value of space to contribute to the experience of existential authenticity wherein "structures fall apart, and differences arising out of the institutionalized socioeconomic and socio-political positions, roles, and status disappear."⁶² On the other hand Turner's *communitas*, as a temporary escape from cognition, seems counter to the higher bandwidth cognitive parsing of live audio-visual stimuli. However, the notion of a communion of equal individuals who submit together to the general authority of the artist, will resonate with LVP audiences. Furthermore, the particular demands on the sensorial realm in live audio-visuals means many also have focused attention to an extent that very little else can intellectually enter one's mind, thus engendering a temporary escape from one's identity and potentially a loosening of personal inhibitions.

Scholars of social psychology also cite Festinger, Pepitone, and Newcomb's term "deindividuation"⁶³ to describe the effect of a crowd or group on the behaviour of an individual. Festinger et al. claimed that in large group contexts an individual becomes able to undertake forms of behaviour in which, when acting as an individual, they would not through a lessening of personal controls (e.g. guilt, shame, self-evaluating behaviour). Deindividuation is often discussed alongside the role of anonymity and can be a factor in both positive and negative changes in behaviour – an innocuous example would be loud clapping (too conspicuous to do as an individual), the less healthy would become disinhibited enough to join others in audience in throwing glass bottles at a performer. These dynamics of identity perception and crowd behaviour does not mean all members of a group will act in the same manner, instead it is understood that participants will exist on a continuum, differing in their ability to deviate from social norms. Within LVP there could be a convergence of interest within the group who would thus share in their expectations of the event.

Environmental presence

The last consideration in this section is the extent to which the environment either influences the audience's understanding of presence and in turn their 'mental model,' or if the environment itself appears to know that you are there and reacts to your involvement, thus increasing the subjective sense of 'being' somewhere.⁶⁴

Starting with physical environments - concert halls, alongside exhibition spaces are part of the built architecture of urban planning, their aesthetics, concepts and materials are carefully crafted as part of the ongoing fabric of high culture. However, the most common spaces associated with LVP such as night-clubs, and

music venues are regarded as unprepossessing environments, at best neutral 'raw' blanks over which stimulating LVP's are created (and experienced). In short, any architectural qualities of such spaces should not distract, or overly stimulate but rather recede into the background and are passive within the audience's cognitive, mental model.

The interior design of the nightclubs in the 1950s would have a stage, orchestra and dancefloor, but successive decades would see the orchestra repositioned or dropped for a performers' booth, and then later these were enhanced with the addition of multiple screen technologies. In contemporary LVP spaces, the performing artist and their hardware are ordinarily semi-elevated, positioned upfront to allow for better audience line of sight and framing by the set lighting, large visual projections and or screens. This represents an ongoing digitalisation of experience in terms of increased sophistication of programmable ambient lighting, the quality and size of the projections and screens, alongside the dynamics of the sound system. These all work together to direct the audience attention towards the main audio-visual stimuli. The audience itself is normally not lit or given special consideration in the interior design; furthermore, this low-lit ambience allows individual participants to dissolve into a more homogeneous crowd identity.

Within LVPs it is not common (unlike Art installations such as 1024's *Vortex* responsive sculpture⁶⁵) that the environment in which the audience find themselves is able to sense and react to their presence. However, the visual representations on the screen could be a simulated environment, which may play some role, if absorbing enough, in offering a sensation of being transported into the environment. For this effect to work, representation would have to bypass the established pitfalls of live performance whereby the visual content is normally fragmented, remixed and short in duration.

Whilst the majority of venues might be cognitively neutral (with regards to commanding attention), there are some notable venues that do offer LVP whilst being environmentally influential. Such an example would be Berlin's Berghain, which as a space is often referred to as the 'temple to techno.' Berghain is architecturally striking as a towering former power station,⁶⁶ its inner structures are cavernous, its main room is intentionally industrial, featuring stripped-back exposed concrete and steelwork. Berghain as a site also comes with a specific narrative context and heritage which can be built upon, this sense of place and heritage would both influence the audience's expectations and awareness of 'being' there geographically whilst also participating in the specifics of an LVP.

Manchester's Hacienda club (1982-2002) was also a visually distinctive interior space fostered by Ben Kelly's graphics and reappropriation of outdoor safety furniture.⁶⁷ The Hacienda also, like Berghain was loaded with culture and heritage - its role through the 1990's was as a creative caldron for emerging British musicians. Demolished in 2002, the Hacienda can now only be experienced as a 3D simulation using VR technology,⁶⁸ this space has been re-built from Kelly's original plans. As an aside, this project is an interesting contribution to the design histories of LVP given how scant organised archival documentation surrounding the artists, the interiors, the ephemeral visuals and or the audiences experience currently is (also see *The Flashback Project*).⁶⁹

Whilst the concept of a "virtual nightclub" does exist, this like most VR is designed to be experienced individually, but has suffered the same fate as other transmediations where the translation of the original medium's distinctive qualities fall short of the VR system's capabilities. Furthermore, current examples of virtual nightclubs are also gamifications of the social interactions. Some examples: Berghain has offered a playful VR training simulation,⁷⁰ the player is transported outside the club and are invited to practice trying to 'get past' the club's notorious strict door policy/doorman - this was regarded as a self-aware piece of clever marketing. There is also Oculus' *Dance Central VR* which offers synchronous online multiplayer dance competitions with a side order of in-game 'selfies' and a virtual lounge. These feel like related products offered to build anticipation for the real LVP or in the case of *Dance Central* to commercially hybrid the club premise into gaming culture.

The contemporary experience of LVP is built on a complex on-going relationship with our interior / exterior architecture and should be considered important when exploring presence (see Chapter 15 on Design and Live Visuals for further discussion).

Conclusion

We have encountered many types of presence and the complexities that come together to foster the mediation at play within Live Visual performances: social richness; as realism; as transportation; as immersion and as a social actor. We discussed how social realism and realism through high fidelity visual simulations is not a key aesthetic concern within the practice, similarly it is rare within LVP that place making and transporting to and from explicit destinations or environments occur, partially because this would be difficult to achieve given LVP's native formal qualities. However, on closer inspection, LVP is well placed to offer forms of para-

social experience built onto the core knowledge that the performer will be, by virtue of it being a live performance already responding to the presence of the audience; however, if the performer is furthermore figuratively represented within the LVP (see Figure 11.3) this could afford extra cognitive engagement through the mirroring of the emotions of the performer by the audience. Additionally, there is also the potential of being invited into an explicit creative feedback loop in the form of autopoiesis, which can also open up positive sensations of being an agent within a living system.

LVP functions as a locus for “socially rich presence” as it facilitates temporary and pleasurable changes in social behaviour. LVP does not normally require audience direct interpersonal communication, but instead offers a distinctive group membership, a Turnerian loosening of self-identity that places more emphasis on the intrapersonal to engage emotionally and intellectually with variety of audio-visual stimuli.

Technology in LVP can often be innovative in its presentation of content (e.g. space mapping, 3D graphics, live mixing) and the audience, depending on their level of technical knowledge, can regard these as displays of virtuosity or feel past these complex formalities and embrace the personalised emotions that the performance, performer and crowd offers to them to in turn complete the performance. Like users of virtual reality hardware, within LVP we also witness a keen audience willingness, perhaps even a *need* to enter into this temporary suspension of disbelief. Together, this indicates a set of phenomena within presence, separate to the actual audio-visual content, that point to an increasing need or pleasure in “doubling down on the human”⁷¹ and our humanizing social interactions.

Changes in culture and society also reconfigure LVP. Digitally enabled peer to peer exchange networks have upended/transformed both copyright and the economic income models for audio-visual artists, whereas live events and the relationship to presence building will play a vital role for artists and consumers alike and we see evidence of how this is being commodified.

The unique status of ‘live-ness’ in this artform requires a change and heightening of attention, in which participants physiological and the psychological systems are invited to focus on the performance and being within an audience. Nightclub culture, having moved from underground origins to professionalised settings, now faces challenges of prohibitive costs through urban environmental gentrification. Traditional venues may naturally evolve as practices situated in hybrid multi-use

spaces. This has the potential to further add to the intangible characteristics in LVP, but as discussed above there are some precedents about the value of environmental heritage, especially venues as site of post-industrial change (see Berlin's Berghain). Without knowing what new trends will emerge within LVP and the impacts from the Covid 19 Pandemic, Statista (2021) continues to forecast global growth in the live music market.⁷²

By considering LVP's as augmented "hedonic products" - the combination of emotions, senses, imagination, and intellect - we also continue the trajectory broadly witnessed within mainstream culture at a larger scale, of affording immaterial experience the same status as traditional objects or products and note their ability to influence user's expectations and desires.

Individuals are willing to pay significant amount to access these time-bound hedonic experiences. Across the spectrum of experimental to stadium filling LVPs, the act of engaging environmental crowded spaces, is to access the dissipation of 'normal' rules of society and identity, by being part of a larger more amorphous social group, who usually converge to appreciate the performance and access temporary cognitive escapism. The perceptual conditions of the interior space - lighting, physical layout of the audience - help to create a sense of losing oneself and provide positive conditions in which the spectators can actively co-create a feeling of freedom, and for some even the feeling of transcendence. These characteristics are welcome contributions in contemporary media, enabling social interactions to foster sensations of well-being.

Endnotes

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