FCJ-043 Multiple Perspectives / Multiple Readings

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In recent artistic work I have been exploring the implications of digital technology, interactivity and internet connectivity that allow people to not so much space/time-shift their visual experience of things but rather see what happens when everybody is simultaneously able to see what everybody else can see. This is extrapolated through the remote networking of sites that are actual installation spaces; where the physical movements of viewers in the space generate multiple perspectives, linked to other similar sites at remote locations or to other viewers entering the shared data-space through a web based version of the work.

This text explores the processes involved in such a practice and reflects on related questions regarding the non-singularity of being and the sense of self as linked to time and place.

Introduction

We regard the self as singular. We imagine the collective other as composed of multiple singular selves. Each 'self' is seen as occupying a single moment in time and a single point in space. The notion of the instance of self is inextricably bound up with this idea of a singular locus in time/space. It is perhaps this, in correlation with memory, which we conveniently refer to as consciousness.[1]

The geometry of vision we accept as conventional is the inverted triangle, with the 'eye' at the apex of the triangle and the ocular field composed of that lying within the boundary of this triangle (Lacan, 1977). Such representations of the visual field typically manifest as single graphical forms with a single apex, related to the single, even if abstracted, 'eye'. Such a representation functions to reinforce our accepted belief that the self is singular and can only occupy one point in space at any one time. This paradigm is also evident in the structure of mechanised visualisation and image recording systems we have developed (2D and 3D imaging systems). This dominant mode of 'vision' and, by implication, notion of self, is also evident in how we visually represent things; for example Cartesian space and its unique vanishing point functions as a correlate, although inverse, triangle relative to the geometry of vision outlined above. Thus we can see how our artifacts, in their very structures, map onto our models of the human and thus reflect our sense of who we believe ourselves to be.

Background

Over the past two decades my artistic practice has been focused on questions around identity explored through the use of interactive spaces where the act of interaction itself functions to foreground issues concerned with being. The intention of this work has always been artistic. That is, there is no pretence in any of these projects to a position on psychology or the less rigid domain of philosophy concerned with ontology. As an artist I have often been inspired by well thought out and argued theoretical positions but I have never felt any compulsion to make work with the necessary rigour and internal coherence that such academic practice demands. Art is not a means to make an argument, nor is it a device to illustrate theoretical concerns. Rather, art is that human activity which can confound the basic sense we make of things, such that we are then able to see things in a manner we might otherwise never have considered. It is in the creation of dis-juncture between the thing and its representation that we come to see the thing and its relation to other things, particularly ourselves, anew.

My intent, when creating works of art that function to disturb the manner by which we physically see things, is to disturb our accepted notion of self as evidenced through how we 'know' ourselves through our sense of seeing. The objective is not to author a new theoretical position, nor to reflect an accepted one, but to destabilise our sense of self as a subjective experience in the hope of giving cause to doubt, at a subjective and experiential level, this basic belief in self.

A primary point of differentiation we subjectively employ to maintain our sense of internal unity and uniqueness is that between the self and the other.[2] Although it is well established, with numerous arguments having been made regarding cultural, sociological and psychological factors, the focus of my practice has been in engendering a subjective 'failure' to differentiate, resulting in

a process of de-differentiation of self and thus a re-positing of self as non-singular, de-centred and distributed.

Development

10 Technology has functioned, for as long as people have developed and applied it, to extend human ability. One human capability which has been subject to numerous technological enhancements is vision. Generally these enhancements have been concerned with either allowing us to see things that we cannot see due to spatial limitations (they are too far away, too small or obscured by some other element) or temporal restrictions (things that have happened at another time). Technologies such as the telescope, microscope and periscope have been developed to deal with the limitations of space. The camera fulfils the same role relative to time (Cubbitt, 1991).

11 However, as we all know from basic physics, time and space are not separate things but are the dialectical aspects forming the fundamental medium of being (Russell, 1997). This has been accepted as conventional scientific knowledge for most of the Twentieth Century and as an idea has inspired numerous artists, perhaps most famously Picasso and Braque, with the initial development of what is now known as Analytical Cubism. Modern physics, as best exemplified by Einstein's theories, has, along with contemporary psychology, been amongst the most influential of knowledge systems upon Modern artistic practice.

12 Nevertheless, it would be an error to seek an interpretation of Picasso within the paradigms of physics for it is unlikely that Picasso's intent would have been in any respect scientific. More likely, he managed to find something in contemporary scientific theory that allowed him to further his objective of destabilising the way things seem to be. His interest was in how we feel, or know, ourselves to be relative to the subject or other. Picasso's interest was most likely in ontology, not physics.

13 Analytical Cubism is typified by its representation of the subject as a highly fragmented, often incomplete, object within a similarly treated context. A primary device in achieving this fragmentation is the use of multiple points of view in establishing the format, angle and placement of the subject. In such work the multiple points of view are clearly those that were available to the artist (either in reality or in their imagination) and although they may become numerous their number is finite.

14 My own work has taken, to a degree, ideas as represented in work such as Picasso's as an initial point of departure. I must admit though that although I am an admirer of his work, and particularly of that period known as Analytical Cubism, the connections between my own recent practice and Picasso's work only dawned on me retrospectively (although this does not mean that his work did not influence mine…just that if it did so it was not conscious).

Application

When developing the multiple viewpoint model employed in my recent practice, initially in a work entitled Babel (Biggs, 2001a), my primary interest had been in ways by which I could solve the problem of shared three dimensional perception in shared interactive and immersive three dimensional spaces (what are typically referred to as responsive environments or virtual reality, although I find neither of these names satisfactory). That is, I was concerned with the viewer's viewpoint (or viewers' viewpoints), not the artist's. How to represent the 'point of view' is a fundamental problem in

15 such work. When there is only a single inter-actor (as in conventional head-up Virtual Reality systems) this is not a problem. The system is able to calculate both the ocular origin of the viewer and a three dimensional view around them that satisfies the requirements for a coherent, convincing and conventional three dimensional scene.

16 However, as soon as more than one inter-actor is involved in such a system a problem emerges, as the technology is still required to construct a coherent three dimensional view determined by the points of view of the participants. Two typical solutions to the problem are usually employed. Firstly, one of the inter-actors is assigned a lead role (this might be dynamically assigned and reassignable) in the definition of the point of view and therefore the construction of the ocular field. This role is usually assigned to the inter-actor who is also in control of the interactive 'levers' of the work [3] , although in some works the roles are kept separate such that a communications

dynamic is formed between the 'one that can see' and the 'one that can act'.[4] A second approach to the problem is to calculate a generic view, usually through some sort of median sampling of inter-actor positional data and activity. By this latter method a single point of view is calculated that is in some manner the mean average generated by the total number of view points and their relative positional data. This results in a generic view that relates equally to all the views but does not necessarily map onto any single one. In this solution any attempt at a sensory representation of three dimensional space built around the subjective eye of the viewer is abandoned (Barron, 1996).

17 Neither of these approaches have ever seemed satisfactory to me and thus have functioned to deter me from employing three dimensional visualisation techniques in my practice. My primary interest in all my work is the interaction of people with other people (not people with machines) and how through the manifestation of this interaction new experiences can be generated that allow us to further reflect on what it is to be 'us'. Due to this all my interactive artworks have been, by necessity, multi-user. Thus it was clear I would always have concerns with three dimensional visualisation as the problem of the point of view would always be there to confound and compromise the (inter-personal) intent of the work.

18 The commissioning brief to design and build Babel was clear; that the work had to be concerned with libraries, that it must exist on the internet and that it must in some fashion involve the notion of navigation. My immediate response to this was to imagine a navigable virtual space that people could explore, and where the contents of a library could be navigated in some manner. The idea evolved to the point that it was clear that this space should be multi-user and that the various 'users' would be explicitly aware of one another. It was a small step from there to decide that the visualisation of all this should be such that the navigational system and the data to be navigated should be the same thing. Then the problem emerged: How would the issue of 'point of view' be addressed? After looking at the alternative solutions to the problem, as outlined above, I decided to use neither of them and to use instead the usual convention of each viewer having their own point of view, but to simply have them all visualised simultaneously, rendering them in real-time into a single multi-layered representation of space. This allowed people to be immediately aware of other participants, to render the entire scene as a product of this multiple-view-point ocular space, and to fold the various components of data, interface, user modelling (user presence) and visualisation into a single graphical model. It also satisfied my poetic need to create a work that in some fashion caused a dis-juncture between each of these components.

19 Since the completion of Babel I have continued to develop some of the emergent key themes of the work through pieces such as Precession of the Equinoxes (Biggs, 2001b), Parallax (Biggs, 2002a) and Tristero (Biggs, 2002b). The works Precession of the Equinoxes and Tristero exist as primarily online works. Parallax exists as primarily an installation but with an online component.

20 When Babel was first produced the intention was that it would be an online project. However, as work progressed, it became clear there was a compelling case that it could also become an architectural scale site-specific installation. Thus when the work went live on the internet this was complemented by three installation versions of the work at the three main libraries comprising the commissioning agent (Essex Libraries, UK). This involved large scale interactive projections of the work onto the three buildings, each in a different town, either inside or outside, of Babel, with all of these projections linked to the internet such that inter-actors, whether at one of the three locations or at any location on the net, would be able to participate in the collective process of visualisation that the work is primarily composed from.

21 Parallax sustains this approach, although the work has been designed from conception to employ and exploit this device, whereas with Babel this arose through an evolutionary iterative artistic process and was not the initial intention. In Babel the content was concerned with the taxonomies of knowledge that determine how we create our libraries and how to navigate this ever burgeoning data-space (with implicit reference to the now potentially un-catalogue-able scale of the internet through the re-mapping of Dewey Decimal numbering onto URLs of similar taxonomical value). By contrast Parallax is a determinedly formalist work where the focus of the piece is on the process of visualisation itself. That is to say, the work could be considered a structuralist exercise in that the choices of the visual elements were primarily determined by the form of the visualisation rather than a desire to visualise certain content.

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It was clear that Parallax would be composed of multiple over-layed three dimensional views so the imagery required would have to be simple, without backgrounds or multiple related components, to avoid confusion and aid perception of the implied and critically important multiple view points. Secondly, unlike Babel, which was primarily an online work requiring low-band solutions (e.g. text instead of image), Parallax, as primarily an installation-based work, could be high-band and thus use photographic quality moving imagery (as is the case with most of my installations). Thirdly, most of the movement in Parallax would be the result of the parallax effect (where objects nearer the eye appear to move faster than those further away) itself caused by the multiple movements in the installation space of the various inter-actors.

23 To aid in the formation of the strongest three dimensional illusion possible it was obvious that the objects that would come to compose the three dimensional views would also have to be moving, but not moving through the virtual space relative to one another and the overall spatial envelope of the ocular field. Freer movement of the objects would have functioned to confuse the parallax effect that the three dimensional illusion relied on. Thus it was determined that the objects would move around their own axes, this in turn heightening the three dimensional effect as the viewers gain sight of all aspects of each object.

24 Thus, the selection of the imagery was dictated by a set of very stringent criteria. To satisfy the needs of the piece I had to select imagery which I could record in digital video and in a highly controlled studio environment, with the usual array of systems available to me. The objects would need to be singular, isolated, visually simple, rotating around their own axes (and thus of a vertical characteristic, as opposed to the naturally horizontal spatial movement that is the parallax effect) and yet visually rich and subtle with clear three dimensional properties. The immediate solution was the human figure and thus it was determined that three appropriate figures which by their nature spin around their own axes could (arbitrarily) be Sufi dervishes, ballet dancers and children's spinning toys. Any reading that might be made of this, and I, as well as others, have come up with many, might be rewarding but are ultimately arbitrary. I leave it to the individual's imagination as to what it all might mean, as this reflects again upon the inter-dynamics of the work as represented in its central motif, the multiple point of view.

25 The reasoning for the use of three screens was similarly determined by a simple factor; that together, and arranged as they are, they create an easily constructed and self-supporting structure that in its floor plan models the ocular field that the work is based on – the triangle.

Conclusion

26 The intention here has not been to justify practice through theory, nor to illuminate theory through practice. It has been to employ resources available in theoretical discourse and artistic practice to evoke and further explore a number of artworks that concern themselves with the relationship between perception and the notion of self. To some degree, it was not my only intention to enact a convergence of disciplines to see how they might inform one another; I also sought to explore their limits through a possible confounding of the intentions of this particular instance of convergence.

Author's Biography

Simon Biggs was born in Australia, 1957, and moved to the UK in 1986. A self-taught visual and inter-disciplinary artist, he studied Electronic and Computer Music at Adelaide University 1979-81. Since 1978 Biggs has been working with computers and interactive systems within large-scale installation, web-based artworks and other contexts to explore issues around identity and reality as social constructs. He is also widely published internationally as a writer and internationally active as a consultant curator. See https://www.littlepig.org.uk/ for a more detailed biography.

Notes

[1] The subject of Consciousness Studies is explicitly converging with the study of the creative arts, as exemplified by developments at the University of Wales, Newport and the associated CaiiA Star centre for post-graduate studies (Plymouth University).

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[2] Theories concerning the definition of the self relative to the other have become received knowledge in contemporary culture, although there is actually a field of theories, many of which are exclusive of one another. There is no intention here to engage with any of these theories other than to simply identify that they are there, they are commonplace and all have some relevance to the subject in hand.

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[3] This is the conventional CAVE (Collaboratively Actuated Virtual Environment) model, as exemplified by Dan Sandin's (Illinois University, Chicago) permanent work at the Ars Electronica Centre, Linz, Austria.

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[4] Some works of Char Davies (https://www.chardavies.com/immersence_home.htm) are an example here.

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