Technology and Creativity at a Moment of Digital Transformation

As in other earlier presentations I like to situate what I am about to discuss in relation to the imperative that engaged our most primitive intimations to communicate something other than the bare essentials of survival. So our earliest ancestors might have felt the need to communicate to their fellows an experience they’d had – such as sitting and gazing across the tree canopy in an absorbed, reflective and contemplative act, because they were moved by the site of the beauty surrounding them. If a being was sophisticated enough to be moved by something that was beautiful that did not involved their own survival, then they would have certainly been sophisticated enough to want to communicate this feeling to their fellows. Why? Because communication through mimesis or diegesis and the response it would draw would confirm their own experience.

So the look our ancestor would have been engaged in would have been full of sentient conscious energy. Perhaps the ape made its way down the tree and made some gestures, or traced some lines in the dust to communicate what he or she experienced in that moment of reflection – and in that act of description of its internal state both the idea of art and of the artist was born.

That attentive gaze has been with us ever since and is now resident not only within the artists gaze toward their subject, but also in the visitors gaze in
attending the museum, cinema or art gallery - and that energy is met by the gaze looking back out at us, captured in every image where the subject stares back out at the world. How that energy travels is of the utmost importance.

In his major work ‘The Master and His Emissary’, Professor Ian McGilchrist of All Souls Oxford, tells us that the brain is asymmetric in many of its functions and that the right-brain governs left-side operations and left-brain governs right-side operations. Though vision occurs in both hemispheres of the brain, he argues that left-brain levels a narrow-focused attention on the world and right-brain utilises broad attention.

Significant then, that 99% of cinematographers construct an image with their right-eye focused about 2 inches away into a viewfinder, using their left-brain narrow-focused attention - whereas cinema audiences watch the output of the cinematographers endeavors at a much greater distance, with their right-brain, left-eye, broad-attention.

Equally significant, according to David Hockney in his ‘Secret Knowledge’ of 2001, is the possibility that for more than 600 years, artists made images by looking directly into the viewfinder of the camera lucida. Hockney trained himself in the use of this device that uses one or more planes of glass, or a prism, that you look through – this is in effect a single lens to concentrate a
right eye, left brain narrow-focused attention on the world and so enables you to superimpose an image of your subject projected on the surface where you will draw. This then allows you to trace around the outline so that your depiction of reality is ‘correct’.

Hockney asserts, that by 1400 we had turned our collective mind to the project of imaging the world with as precise a left-brain focus as possible. He argues that this was driven by developments in glass manufacture which explored the refractive and reflective properties of glass, then enacted with microscopes, telescopes and mirrors, where for instance a concave mirror could project an inverted likeness of the world on a canvas.

He argues that a view of the subject that uses lenses and mirrors to stare at, or project a single unitary vantage point, has produced a set of attitudes towards the truth of a subject that is now invisible to the viewer.

This includes the idea that the use of perspective, the compressing of reality in a particular kind of way that works for the 2 dimensional image, is the ‘correct’ view of the world – and yet as Ian McGilchrist points out in the Master and his Emissary, it is only one view of the world. Once you’ve become aware of this lens-based conceptualisation and seen its effect, you’ll never be able to see an image accomplished with this technology again, in ignorance of that fact.
It’s obvious what an image is of course, except when it is text. If you look at text upside down it loses its linguistic meaning and reveals itself as image – and with the camera lucida, for 600 years monocular images of the world were upside down when drawing them. The right way up, text is also an image but with such strong conditioning its hard to disassociate that meaning. So text is both carrier of meaning and image value.

Early Egyptian text was derived from a series of pictograms or hieroglyphs – and so is easily seen as images. Chinese and Japanese were a later development of pictograms into ideograms which had more linguistic flexibility - and Arabic developed as an advanced form of abstracted image whilst being a graphically based text.

With the flourishing of the hand copying of text in the monastic period, text was accompanied by separate images surrounding and framing it. In paintings of the time, there were often many viewpoints represented through the subject being displayed several times in the same picture to represent their passage through time, or place. So prior to the development of printing, a kaleidoscopic depiction of the world could exist – where the two viewpoints of stereoscopic binocularity were free to play with time and space and this tendency continuously shows it’s traces throughout history at various times.
But with the advent of printing, begun when the Goldsmith Gutenberg formulated a mechanical way to inscribe text around 1436, the period of text based dominance parallels the take-up of the camera lucida by artists in search of a singular gaze at the world. The dissemination of text is therefore concomitant with the development of the monocular lens-derived image in the western world. The colonial and mercantile imperatives of the late renaissance also influenced and encouraged the adoption of single point perspective too.

However, as Hockney further argues, the inclination to pursue a ‘correct’ representation of reality finally fixed the image in a true likeness of reality, appears with the invention of photography around 1840: At that moment the project of art that had previously been about the capture of a ‘true likeness’ was concluded and art was released to investigate and explore what might be outside of the single lens based representation – and so modern binocular art was born, leading initially to Cezane, the Impressionists, Cubism, to Duchamp’s release of the artist from the patron, and onwards, unsurprisingly developing towards prioritising the conceptual, and so surpassing a classical understanding of the image.

In parallel, the apogee of the printed word has been described in his book, ‘The Intelligence of Art’, by Thomas Crow, ex-head of the Getty Research Institute. Here he argues that contemporary theories around the
appreciation of the image rest with the development of the Frankfurt School:
Adorno, Horkheimer, Benjamin, Marcuse - that coalesced with developing
American theory when members of the group had to leave Frankfurt for New
York to avoid Nazi persecution before the 2nd World War.

Crow argues that this group of thinkers located their appreciation and
evaluation of art through dialectical language and thought processes that
was itself alien to the way the brain receives images; that their positioning of
the argument foregrounded text as the signifier which supplanted the actual
function of the image – that the description of the image superseded what it
was actually describing.

So by subsuming image in language this systematised act of interpretation
was then to set an unnecessary boundary around the function of the image
that has restricted us until the present day. Dialectics seeks to understand
through disagreement with the strongest argument winning. We then fix a
definition even if it means citing its opposite.

At the turn of the twentieth century, relativity and quantum theory arose,
both of which wrong-foot the simple linearity of dialectical argument.
Heisenberg famously recognised that we can determine the position of a
particle and not its velocity. In common-speak this means: ‘Facts limit the
possible truths available’, or put more materially: ‘knowing a fact about something radically influences the essential nature of that thing’.

Following both McGilchrist and Hockney in their insights, to retain and maintain the full possibilities and meaning of a thing as we observe, we have to resist trying to know it by only one of its possible attributes or states. This is the stochastic view that undertakes to recognise that all things are constantly changing, that to define is to alter, that understanding is possible without limiting what is before you.

Within current neuro-scientific studies it becomes clear that our physical senses reveal only one ‘octave’ of a potential 80 octave spectrum of energy and that to enter into the ‘act of interpretation’, though an important linear pursuit, only uses a small part of our perceptual mechanism. We know we are endowed with an empathetic and sympathetic response circuit through mirror neuron activity and can ‘feel’ how others feel and transmit feelings to others too. FMRI scanners can visualise for us the movement of attention across the brain – and one of the surprise discoveries of this technology is that something in us makes choices on a quantum level that is milliseconds before the conscious will instructs the body to act: experimental research infers that we are cognizant of our surrounding reality prior to our conscious interface. In complete contradistinction to Western dialectical thought, in McGilchrist’s terms, we are the Emissary – not the Master.
So, at the beginning of our human form, when our oldest primate ancestor sat and gazed across the tree canopy, the look our ancestor was engaged in was governed by a conscious energy that was directing his or her choices, guided by a deeper impetus. Our contemporary gaze is also full of the sentient energy shared with our ape ancestors and it is now measurable in audiences as a small voltage change generated by the massed neurons jumping across the synapses of the audience’s brains.

It’s been found experimentally, by the end of a feature film or a play, that everyone in the audience will blink at the same moment – we as a group will have decided when it is the least important moment to look – perhaps coordinated by a collective ‘master’ gesture we individually utilise to generate the experience of self-consciousness. This is a form of entrainment.

Another and far simpler form of entrainment is when two clocks with pendulums are set in a room that eventually swing or entrain together – so the idea of entrainment is a synchronous coming together of physical or psychological phenomena - and the idea of entrainment utilised as a metaphor offers us a way to stochastically conceptualise the use of attention that is distinct from its use in the act of interpretation. Entrainment joins, but interpretation, because it separates the self from its own experience through
the act of intellectual discrimination, retains and compounds separateness.

In short, my argument is that we should resist any theory that perpetuates any argument that promotes the deterioration of the worth or meaning of the image through further and more abstruse interpretative text based strategies, which has been adopted as the only basis to appreciate art. Of course language used theoretically can be a useful description, but as Chomsky points out, it also circumlocutes and determines the boundary of meaning - and therefore limits the potential stochastic reality of a thing or idea.

It would seem that we are effectively witnesses that exist at the meniscus or surface of exchange that is itself a transactional surface. We know now that our gaze radiates outward from the self as energy. We now know that the focus of attention of the audiences’ brains can be charted by mapping the voltage fields they generate.

We can now map attention – we can now map the internal world of the ape that once looked across the tree canopy and return that gaze as you now return that gaze to me. This stochastic position and the form of understanding that follows the adoption of this position, allows the development of a synchronous concept of entrainment, as opposed to
continuing to perpetrate the linear deterministic use of interpretation, in a paradigm shift that has already begun…

– and of course one of the possibilities that can help carry this change is the potential located in the design function and application we call the ebook, with all of its possibilities, as this offers us a way to further conceptualise something that was originally singular in its use, but has the potential, if we enter an open frame of mind, to repeal our boundaries and allow us to think stochastically about the world we live in.