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In the Mind's Eye: Thought-Pictures and Ethereal Presences

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(not for further circulation –paper represents work in progress for
'Figuring the Soul')

- Lewis Carroll, Alice Liddell Feigning Sleep , 1860
- * Hawarden Girls Asleep c 1863-4

The visionary Romantic poet Samuel Taylor Coleridge placed at the beginning of his *Rime of the Ancient Mariner* an epigraph from a seventeenth century mystic:

‘ I can well believe there are more invisible than visible natures in the universe... The human mind has always sought after, but never attained, knowledge of these things...’ⁱ The principal faculty of mind applied to this quest was the Imagination, for Coleridge as it had been for Shakespeare. As Theseus says in *A Midsummer Night's Dream*, 'the imagination bodies forth/ The forms of things unknown/ And gives to airy nothing a local habitation and a name'.

(Here is the negative plate of Lewis Carroll's image of Alice Liddell Feigning Sleep, one of several photographs Lewis Carroll made of the little girl who inspired the adventures in *Wonderland* and *Through the Looking Glass*.)

Another photographer in these early decades of the practice, Clementina Hawarden, frequently photographed her daughters, in enigmatic costume, voyaging by day with eyes closed into the inscapes of consciousness.



The fascination with dreams and states of inwardness in the Victorian era derived part of its character from models of mind, descending from classical philosophy and from seventeenth-century interpretations of the tradition, but these ideas are enmeshed with theories of optics and the increasing potential vision of optical devices. So a double pulse runs rhythmically through time: optics expand and channel vision, amplifying the mind's own processes; at the same time visionary ambitions make optics work to serve their needs, which include the apprehension of spirits existing out of range of ordinary physical faculties. The phenomenon of psychic photography, which strikes the contemporary audience as absurd and even embarrassing, becomes logical, even reasonable only in the light of this tradition. The interaction between the inner eye, contained in the dark chamber of the mind, and its projections, fantasies and images, mediated by optical media, remains highly dynamic throughout the history of black and white photography, and affects cinematic special effects and virtual reality today. Models of consciousness, and especially of the imagination, also relate profoundly to the kind of space-time as represented in the photograph. In a crucial essay, Joel Snyder has argued that optical devices were invented and modified in order to deliver images that fitted Albertian and Vitruvian ideals; this quest culminated in the photographic camera, which did not and does not function as a trusty replicator of human visual experience or beheld, experiential realityⁱⁱ. (For one thing, most people are lucky enough to see in colour.)

Contemporary instruments of vision have now taken our powers far beyond bodily sight, and their visions – X-rays, Magnetic Resonance Imaging, Ultrasound – have become part of our intellectual furniture; at the same time they reveal to us the sensory boundaries which we inhabit. Our cognitive range exists perpetually in play between these powers and these limits, and what we can understand from this experiential instability is that, in the words of Frederick Burwick, 'What we come to know orders and complements what we can actually see: we do not see what we think we see'ⁱⁱⁱ.

It is possible, I believe, to extend Snyder's argument into the realm of fantasy, and propose that optical and other technical means were also developed to reproduce mental images, specifically of the type called 'eidetic', to use a useful term coined by twentieth century psychology.



‘Eidetic’ comes from *eidos*, used by Aristotle for that which is seen, or ‘form, shape, figure’, both of something particular and of a generic kind of form, and it is related to ‘*idein*’, to see, and *eidolon*, a shape, image, spectre or phantom, also a vision or fancy. Eidetic thus evokes vivid images that are seen by the mind’s eye and arise from fantasy, reverie and reflection. Current lively thinking about consciousness continues to explore possible taxonomies for these mental images, with Damasio distinguishing ‘facsimile images or literal pictures in the head’ from ‘basic images’ in the structure of thought on the one hand, and on the other from ‘dispositional representations’, which represent the accumulation of personal experiences (ELLEN - this is your territory, please help!)

These envisioning faculties or processes combine with memory but are not exclusively bound by referents to actual experience. The images they summon characteristically appear clothed in metaphors that communicate the conditions of supernatural other worlds and their creatures according to axioms embedded in religious iconography, in mythological visual narratives, and in speculation about the function and character of the imagination and of the senses, especially the visualizing faculties.

Technological innovation communicated this transition from an external, supernatural phenomenon directed by divine omniscience to an internal, subjective effect of personal imagination: new media, such as the magic lantern, or camera obscura, and, in the late 18th century, the phantasmagoria, expressed above all fantasies of this sort, when pioneers like Philippe de Louthembourg and Etienne Gaspard Robertson raised ghosts, projected devils, and generally created kinetic and illuminated Pandemonium. They wanted to make ‘darkness visible’ and would summon the head of the recently executed Danton in smoke and the show him turn into a skull. The still camera and then the movies continued to revel in this vein.

I hope to loosen the presumptions about the intimate relations between photography and nostalgia as memory and replace it with an emphasis on photography and thrilling fantasies. The nostalgic, even necrophiliac link between the portrait taken from life and the impending certainty of death has been insistently and eloquently argued by both Roland Barthes and Susan Sontag, but by looking at the ‘constellation of knowledges’ that flickered around the making of Julia Margaret Cameron’s innovatory portraits ‘from life’ and poetic

images, we can see the context in which spirit photographs were taken and believed, and other invisible phenomena recorded by the camera.

The history of photography and the uses to which it has been put have over the centuries and decades hardened the bond with memory, record, retrospection, and mourning. Even Jacques Derrida wrote in 1988 that ‘Of all the arts, photography seems to me the only one that does not suspend its explicit dependence on a visible referent. In the final analysis, however perverse or ingenious the montage might be, it is unable to produce or domesticate its referent. It must presume to be given, a captive of what is captured by the apparatus.’^{iv}

But in the early decades of photography, images conjured memories that belonged in fantasy, in eidetic recollection, not in lived experience. These images took form according to principles embedded in language: they incorporated the manifold perceptions of the subject beyond her or his actual experience. Photography acted as the vehicle of acts of constitutive imagination, alongside its pioneers’ documentary uses. What is captured by the apparatus does not have to appear in its own nature, and does not always refer to itself. Indeed that self may not be visible as such in the image: ‘The Angel at the Tomb’ by Julia Margaret Cameron only refers to Mary Hillier, her servant who modelled for her, if you deliberately refuse the terms in which Cameron is framing her glowing and ethereal presence.

The terms fantasy and imagination, originating in Greek and Latin respectively, have entered many languages today as a doublet, often used interchangeably (as I shall do here, while giving examples of differences in usage and definition by others over time). For example, in England, the poet Samuel Taylor Coleridge famously distinguished between the lesser faculty of Fancy, as he called it, and Imagination, which he furthermore subdivided into two orders — primary and secondary. Coleridge’s high claims for the imagination’s power to generate the language of truth draw deeply on Neoplatonist ideas, and while being a uniquely inspired thinker in this field, he reflects the predominance of this philosophical approach in ideas about the imagination, as I hope to show later. Coleridge was not alone in his attention to these powers and their potential.^v The Victorians continued this inquiry.

In 1825, Samuel Hibbert published a foldout chart about dream states, which he called a ‘Formula of the various comparative Degrees of Faintness, Vividness, or Intensity, supposed to subsist between Sensations and Ideas...’ With scientific method, he tabulated



eight transitions in his full cycle, ranging from Perfect Sleep to Somnambulism by way of 'the common state of Watchfulness' to 'the tranquil state' to 'extreme mental excitement', and he graded no less than fifteen different phases in each of them. They start from 'Degree of vividness at which consciousness begins,' where it is still possible to impose the will on vision, to 'Intense excitements of the mind necessary for the production of spectres.'^{vi}

His efforts have a proto-Surrealist quality, and even an absurdist, Alice-like pedantry as he becomes more and more entangled in definitions of his ever-elusive theme: consciousness remains a profound mystery and unyielding to rigid taxonomies.

The topic of the mind's imaginative powers absorbed attention among very varied publics, and developed into Freud's theory of the Unconscious. For example, one of the most frequently reproduced images throughout the Victorian era was Henry Fuseli's painting,

*The Nightmare (1781 – this one from Detroit Institute of Fine Art)

The painting draws, in this artist's most lugubrious and prurient mood, on classical dream theories of incubi and hysteria. There are many versions by Fuseli's hand, supposedly, as well as numerous engravings,

*reductions, and imitations.

In 1862, the philosopher James Hinton wrote an essay, 'Seeing with the Eyes Shut.'^{vii} Two years later, Henry Peach Robinson created his atmospheric tableau, 'Sleep', with two children lying entangled in bed at an open casement, a wide vista of the open sea in uncanny proximity to their bed.

R The light catches a flutter of petals, or perhaps butterflies in a vase by the window; if butterflies, the emblem illustrates a line in the Matthew Arnold poem inscribed beneath the photograph, and alludes to the soul, voyaging in sleep.^{viii}

*Sonnambulist poster

*Whipple and hypnotists

Mesmerism, hypnotism, clairvoyance, and somnambulism all inspired street entertainment in the Victorian city as well as philosophical and religious inquiry. Lewis Carroll for example seriously proposed different states of consciousness in the preface to one of his last stories; they included daydreams, night time dreaming, brown studies, and even



out of body states of trance in which the mind travelled independently into fairyland and other realms, as conjured so unforgettably in his *Alice* and other books.

A celebrated exhibition at the Met in New York ten years ago, in 1993 was given the title *The Waking Dream* on account of this recurrent concern of early photography. It included an 1845 picture, by John Adams Whipple, of an ambulant hypnotist with his entranced subjects. Thirty years later, Julia Margaret Cameron hinted at shades and degrees of mental absorption throughout her photographic career.

*My grandchild sleeping

*First Thoughts

In 'Vivien and Merlin' (1874), she dramatises the spellbinding of the magician as an effect of blindness, wrought by the young woman's charms. Merlin was played by Cameron's husband Charles, and it sets humming all kinds of paradoxes about power exercised by even visionary men – by a wizard - by a sighted woman who has herself uncanny insight. She inquires into mental processes and inspiration : her models insistently reflect, look down or look away. Mary Hillier, her favourite model, one of the extended household of family and servants, appears lost in thought, in the sequence 'The Fruits of the Spirit', she draws the viewer into her state of mind, issuing an invitation to empathise with, not only to behold the physical qualities of the group of Mother and Children.

Cameron's work with her allegories, tableaux, posed groups after Italian Renaissance paintings and other aesthetic sources, such as her friends among the Pre-Raphaelites, embodies the deeply intertissued character of photography and another faculty ascribed to the mind, imagination, as conventionally applied in painting. Later archivists have patiently identified all of Cameron's models and sitters with very few exceptions in a monument of patient scholarship. However she herself effaced their identities because they were not pictured as themselves, not referring to themselves. She inscribed the pictures with names from poetry, legends, religion and stories.^{ix} Her approach casts photographs as dynamic in themselves, generating original images from a shared body of narrative, not passively copying actual events and relaying them to others as capturing what happened at a certain moment in time. She uncouples images from unfolding time and sets them in the atemporal space of mental picturing. A photograph becomes less dependent on its referents, less a print



off reality than a fresh and individual thought-act brought into reality in pictorial form – as ‘image-flesh’ (‘Image-chair’), in the happy coinage of Maurice Merleau-Ponty. It reverses the flow of energy between photographer and photograph, proposing that the print or artefact results from an impression made by a mental act of the photographer, rather than accepting that the photographer simply mediates an impression made in the camera by the visible world. (Evidently, this emphasis on photography as dynamic fantasy, summoning mental and dream products, does not cancel the deep affinity between photography and loss – but the object that is mourned may not always have existed – except in thought.)

Cameron gave Tennyson the 1857 edition of Mallory’s epic, *Morte d’Arthur* – the best edition, and she read aloud to him from it the passage on the Spectre of the Grail. She saw herself engaged in a common enterprise of imaginative cognition, and wrote, for example, about her last great undertaking, the illustrated volumes of her friend Tennyson’s Arthurian cycle *The Idylls of the King*:

Tennyson ‘is the Sun of the Earth and I am the Priestess of the Sun of the Heavens so that my works must sometimes even surpass his ‘

She portrayed him here, reading, inviting us to enter the unseen scenery of his mind.

Her boast – which she follows instantly with a disclaimer of all responsibility for her work and its qualities – still lets us glimpse how equivalent she felt their enterprise to be in representing images from the imagination; by adopting this renaissance principle underlying mythological story-telling in pictures, *ut pictura poesis*, Cameron claims the camera is a tool of fantasy, a prosthesis for the eye of the mind, mediating the faculty of fancy as in a deflecting mirror. She creates of real life friends and servants and their children ‘ideal subjects’ not documentary let alone forensic indices, as would happen through photographic databases later in the nineteenth century.

*Echo

* ‘Call, I follow, I follow, Let me die...’

Julia Margaret’s titles quote this kind of poetic fantasy from in the literature of enchantment rather more than from her contemporary Charles Dickens’s impassioned advocacy. She began a sequence illustrating George Eliot’s *Adam Bede* in 1874 but it didn’t develop. Whereas Lewis Carroll photographed Alice as a ‘Beggar Girl’, a celebrated image



of her as a seductive street urchin, in bare feet with her hand cupped and outstretched, Cameron shows a marked flight from any allusion to the circumstances of her day let alone her own precarious financial situation, especially where young women and children are at stake. ^x Her portraits' titles quote The Bible (*The Angel at the Tomb), and illustrate scenes from Homer, Milton, Blake, Coleridge, Henry Taylor and any number of course of Tennyson's poems, 'The May Queen', 'Maud', 'The Rosebud Garden of Girls', * 'A Dream of Fair Women', and from the epic *Idylls of the King*.

She also drew on religious sources, saints' lives and Anna Jameson's studies of the *Legends of the Madonna and the Saints*; occasionally the young women incarnate the 'Spirit of the Vine', for example, or, in the case of the Greek-Italian Marie Spartali, * the figure of 'Memory' herself.

All these various topoi in slightly varied ways direct the reader towards imagining the subject, often a child or a female figure in the image as an idea in the mind, or a phantom or invented character from a story or a poem, or, in the case of the readers, the photograph invites us into her own reverie. Even her famous portrait heads of Great Men, whom she lion-hunted to make their memorial picture, radiate luminous haloes and disappear into cavernous depths of shadow; she imbues them with a spectral character, like faces recalled with eyes closed.

Julia Margaret Cameron, unlike Lewis Carroll, also made the affinity with heavenly bodies explicit – taking her cue from Italian paintings, Raphaelesque cherubim and Neoplatonist erotes or cupids. The transition into the inner worlds of her own imagination needed go-betweens: children, girls and boys, as incarnate intermediary beings, offer themselves as its undisputed inhabitants.

* Angel * Cherub

She was a most effusive and indulgent and passionately attached mother to all her huge brood, and first really committed herself to photography after her children were all grown up. Cameron exemplifies an energy which seems to me has been very seriously overlooked: the empty nest as a driving principle of creativity! And the camera, and all the difficult processes attendant on producing a photograph, mediated her dreamwork, her passions, her spiritual fancies.



II

Now to the models of mind, including faculties of memory and imagination, in order to place them in relation to those optical instruments that cut the path towards the camera and the still photograph. *When Leonardo dissected human skulls in order to locate the faculties of the brain, he followed medieval physiology in the tradition of Aristotle and Galen, and showed three ventricles in the core of the brain:

A on the first sheet.

He draws the eye as a fold in the very membrane of the cortex, and draws its connection to the *imprensiva* or sensory receiver of impressions, in the first ventricle, and thence to the next two ventricles, where the *intelletto* and *fantasia* meet to form the *sensus communis*. Showing his characteristic naturalist curiosity, he drew an onion in the margin, as a comparison for the cortical layers was describing. Leonardo's union of intellect or mind and fantasy within the faculty of common sense aligned imagination with reason, by implication which is unusual on the whole.

This arrangement was by no means accepted, indeed if Leonardo's scheme was widely known at all, and different proposals appeared, with Imagination wandering around, now joined with *sensus communis*, now separated from that function.

B on same sheet

*An engraving of the *caput physicum* or bodily head in 1498, attributed to Albrecht Durer, lines up over the brow *Sensus communis* and *Imaginatio* in one ventricle in the front (B and C on the man's forehead), but then distinguishes this node of Imagination, from *Fantasia* and [*Vis*] *Estimativa* or Judgement at D and E in the man's brain, with *Memoria* at F behind the brain occupying a third chamber or ventricle. The illustrator, was working according to models of mind postulated in Germany before him and during his time. ^{xi}

C on same sheet

Nearly a century later, the zoologist, alchemist, philosopher and polymath Conrad Gesner published, in 1586, his *De Anima*, a treatise on the soul. There he imagined the mind as a house, just such a house as a child might draw to represent home, with a door through which sense impressions enter to form, on the ground floor, the *sensus communis*. . On the



first floor, a 'distinctus alius locus', he places two chambers he calls 'cells', *Phantasia* and *Memoria* side by side, the two aspects of the sensitive soul in the Aristotelian scheme. They occupy the first floor, but this house of the mind is only a humble two-storey dwelling. Providing a roof over these equal and balanced faculties of fantasy and memory, Gesner designated *Ratio* (Reason) at the acumen of the edifice, crowned by a star that irradiates with its light these lower cells. This star represents God, to whom, Gesner explains, all these faculties proceed.

With this brief look at the twists and turns in thinking about the imagination's place in the mind, I only want to stress the historical nature of the topic: the imagination may exist as a faculty of the mind, this faculty may have a structure, it may be discoverable and verifiable and one day we may map its synapses, have its measure, and even be able to clone the very best specimens, but at present we must concede ignorance and review the proposed models of past thinkers. The idea of an inner eye provides a persistent, powerful metaphor for communicating the work of the imagination, for *imagining the imagination*, for making its image. It's a mythopoeic metaphor, that pervades the language of poetry, philosophy and story-telling.

Sheet 2, A, B, C Most famously of all, perhaps, the French philosopher René Descartes located it in the pineal gland in the brain, writing, 'It is the soul that sees, not the eye ...This is why maniacs and men asleep often see, or think they see, objects that are not before their eyes...' In his deliberate and meticulous unpicking of visual experience, he famously drew the figure of a blind man in order to illustrate how the brain makes pictures, not the eyes. (D on the same sheet.)

It could be argued that because this third or inner eye is a metaphor we have lived by, it has also proved a practical stimulus to technological invention, and that innovations like the cinema reproduce a dominant model of the mind's capacity to form images with eyes closed, or with eyes open in the absence of empirical data of any kind.

* Around the same time as Descartes was writing in France, a very different kind of thinker was elaborating a mystical model of consciousness, and, unlike Descartes, publishing it. He commissioned clear and eloquent illustrations, from Theodore de Bry and his



workshop in Oppenheim, and they communicate his thought far more resonantly than his abstruse Latin.

Robert Fludd was an Oxford esoteric philosopher and one of the leading Rosicrucians, and published his thoughts about human consciousness and its relationship to the macrocosm of divine creation in his spellbinding book, *Utriusque Cosmi (Of this World and the Other)*, in 1617-19.

Sheet 3

In the beautiful plate entitled 'Vision of the Triple Soul in the Body', Fludd has disposed the faculties in haloes around the profile of a man with suitably enlarged and sensitive external organs: a luminous single eye, a prominent ear, a hand raised to display the fingertips, swollen sensual lips. The senses radiate into a series of concentric circles labelled the world of the senses (*Mundus sensibilis*), and these are hyphenated to a constellation of *animae*, or souls, inside the cranium: on the left, the sensitive soul, of which the circumference is interlaced with the imaginative soul. Another bridge or hyphen leads upwards from this to another planetary system, the world of the imagination (*Mundus imaginabilis*), where, in good Neoplatonist fashion, all is shadow — the rings of this system, the '*Umbra Terrae*', or shadow of the World, are all shadows of the elements. Fludd writes, '[this] soul [is] called the imaginative soul, or fantasy or imagination itself; since it beholds not the true pictures of corporeal or sensory things, but their likenesses and as it were, their shadows.'

Shadow is a key concept in the history of the imagination; the Platonist idea of shadow has done heavy duty in conveying the character of thoughts that are not produced by direct sensory impressions or experience. And shadows' affinities in the shadowlands of the imagination lie with smoke, vapour, cloudiness: these phenomena can help summon the insubstantial character of spirit and the emergence of ideas. For Fludd, shadow is also original chaos from which form comes forth *ex nihilo* or out of nothingness. Two of the magnificent engravings in the earlier part of the book that deals with the creation of the world show roiling clouds in a ring, embodying the first stage of emergence from darkness visible. They are then followed by rivers of fire. This apocalyptic murk will persist as the visual



expression of the imagination's products: darkness was essential to the success of a séance, for example.

In Robert Fludd's diagram, a delightful wriggly little worm, labelled '*vermis*', no doubt a microcosmic avatar of the great Worm of the cosmos, connects these interlooped worlds of imagination to the faculties of cognition and judgement (*aestimatio*) with their orbiting satellites — *ratio* (reason) in the center of the brain, with *intellectus* (intelligence) and *mens* (mind) as its outer rings. These radiate toward the angels and the Trinity, in full glory above to complete the *Mundus Intellectualis*. At the back of the head, two more conjoined souls appear, designated *Memorativa* and *Motiva* — Memory and Motive Force, Fludd explaining that the motive soul controls involuntary motion. These are dependent aspects of memory that interact with the sensible world — that remember and safeguard its features. *Visionum*, or the capacity to envisage, appears here, as part of memory.

None of these differently labelled aspects of mind is at all stable, however, even in Fludd's own vocabulary, let alone transhistorically. There is no point in trying to make Fludd's intricate mysticism coherent and consistent (and contemporary English renderings of the terms can only be approximate). But it is clear that he considers imagination an intrinsic component of consciousness and its divinely ordained purpose: reintegration with the original wisdom which generated it in its own likeness.

Sheet 2, E

*Later in the book, the *Visionum* or *imprensiva* or receptor of the eye's data was envisioned as a screen on which thoughts were projected: in one of the most remarkable illustrations to 'The Art of Memory', the concluding and most famous part of Fludd's book, an eye appears in the exact position of the imaginative soul in the earlier diagram. Though he is discussing memory, in the course of a lengthy commendation of mnemonic devices, he concentrates on the mind's power to summon up pictures, through the '*oculus imaginationis*'. This 'eye of the imagination' radiates a tableau of images: a tower (of Babel?), a guardian angel showing the way — or perhaps Tobias and his guide, an obelisk, a two-masted ship on a high sea, and the Last Judgement with Christ in glory on a rainbow among trumpeting angels while the dead rise with supplicating hands.



These images belong to various orders of representation or imagination: the ship and the obelisk might be remembered from a traveller's first order experience, or might be visualized from a browser's previously beheld representations. Alternatively they may be conjured in the mind's eye from verbal description —or conceivably, from tactile or acoustic information. Others are generated from imagery that is itself fantastic, whether conveyed in the first place verbally or visually, as in the instances of the conventional depiction of Domsday and of angels. This inner eye in Fludd's Neoplatonist conception does not receive images: it projects them on to a memory screen that lies beyond the back of the head, floating in a space that does not exist except in fantasy.

Fludd's work inspired Athanasius Kircher, a Catholic, indeed a Jesuit, a generation younger than Fludd, who was studying and writing in Rome in the late sixteenth century. Kircher combined prodigious learning, scientific inquiry, fantastical hypotheses, eccentric hermeticism and mystical explanations which drew people to visit him and write about him, his work, and his collection of antiquities and natural phenomena in the Jesuit college in Rome during his lifetime. (He contributes, I think, to the terrific cameo of a priestly savant in Umberto Eco's exuberant novel, *The Island of the Day Before* (1994)). Kircher had an anthropologist's curiosity about the peoples of the world. He wrote a book about China, with lists of the idols whom the Chinese worshipped and respectful accounts of their learning; his famous *wunderkammer* in Rome was full of ancient marbles, Aztec masks, magic amulets, fossils, spiders and gems, mandrake roots, Egyptian mummies and included an entire abcedary made of stones in which the letters of the alphabet appeared, inscribed by nature, chance or divine providence.^{xii}

But Kircher was above all a scientist — or, as scientists were in the seventeenth century, he was an alchemist, a mathematician, a philosopher of science, and an adept at at optics. He knew Robert Fludd's work and its influence can be felt in his most famous book and magnum opus, *Ars magna lucis et umbrae* (*The Great Art of Light and Shadow*, published in 1646, although Kircher was undertaking in these pages a very different, empirical study of reflection, refraction, projection and other possibilities of light. He is an important figure in the history of mirrors, or the science of catoptrics. But Kircher the experimental scientist also roamed occult dimensions, as did Fludd, and he slips



inconsequentially from analyzing optical effects to the illusions produced by the imagination. He is animated by a voracious, wondering curiosity that finds in natural phenomena the handprint of divinity, but at the same time, he wants to penetrate the mysteries of physics and of nature, to illuminate the secrets of God's ordering of the universe, so physics and metaphysics meet and mingle in his observations of light's behaviour.

* On the title page of Kircher's *Ars magna*, rays of sunlight, bounced off a mirror held by shadow, pierce through the roof of the cave on the Shadow side and illuminate it. The dark blank of a mirror, the tool of shadows, is a key instrument in Kircher's system of visual revelations. The engraving brilliantly and indeed lucidly condenses the mystical Neoplatonism of Jesuit Rome in the seventeenth century and its modernising connection with the discoveries of the New Science. A sun god who bears the symbols of Jupiter and also a resemblance to the Christian Redeemer, shoots rays into a cave of shadows, where, in contradistinction to its Platonic forebear, a mirror catches the beam and directs its light through a lens back towards the divine source. The image also demonstrates the paradoxical illumination of darkness and the symbiosis of light and shade, casting Night as Juno consort of Jupiter, as the Moon to his Sun, who is also receiving his rays and returning them to the material realm below in a beam of light. Here God himself, the embodiment of all light, becomes the source of imagination's products, or of mental images of phenomena that cannot be seen with bodily eyes.

The illustration of the magic lantern, which appears in the book's second edition of 1671, is the first extant of this device and for a long time Kircher was credited with its invention.^{xiii} But Kircher does describe his pioneering experiments, when he prepared glass slides with salts and chemicals the magic lantern shows he gave in the Jesuit college in Rome. Kircher wrote: 'We in our college are accustomed to show in a dark chamber a large number of sufficiently bright and luminous pictures, to the greatest wonder of the spectators.

..^{xiv}

The engravings in *Ars Magna* of the camera obscura contain certain elementary errors that make it certain Kircher himself did not oversee the artist at work: for example, the painted slides would need to be upside down in the projector in order to appear side up on the wall, as illustrated clearly elsewhere in the book, in one of the first edition's many optical



diagrams. But these illustrations of the magic lantern's prototypes have a significant feature in common : the subjects in the images projected cannot be seen with the eye of the body, except in representations by artists. The images in these examples of visual phenomena are fantastic, and they give that certain frisson of the uncanny and grotesque, designed to excite fear as well as pleasure. These are images that ipso facto connote the visions of the mind's eye, and in order to do so they draw on a supernatural lexicon. . They depict eidetic translations of metaphysical metaphors, envisionings of the supernatural, or what could be called hallucinations. It is hardly an accident that a naked soul in the flames of hell or purgatory appears burning on the slide projected onto the wall. * This illustration, for example, from the first edition of the *Ars Magna*, borrows the traditional mediaeval iconography of the *danse macabre*, to show Death as an animated skeleton with the scythe of the reaper and the hourglass of Father Time. Similarly, another engraving, published in Leiden in 1720-1, illustrates an early slide projector, and despite the learned and scientific title of the mathematical treatise in which it appears, it shows a huge, magnificent devil leering on the wall. The device thus reproduces the mind's capacity to fabricate what the eyes of the body cannot see.

In his account of the phantasmic powers of imagination, Kircher explores the dominant metaphor of a screen, and then two dependent metaphors: first, the blackened surface of a mirror, and secondly, the smoky and boiling vapours in the brain of a person afflicted with melancholy. He borrowed the image of the mirror from optics, and the image of the inchoate and turbulent spirits from explanations of cosmic origin in hermetic physics, as represented in Fludd's work; it is not clear how metaphorically he intends their application to the mind.

Kircher discusses many varieties of illusion in the second book of *The Great Art of Light and Shadow*, as though the tricks that result from his experiments are, as he demonstrates, natural consequences of the properties of things, and not illusions. The play of sunlight on clouds or in mirrors produces unexpected wonders, including visions. His thinking continually collapses the imponderable — fantasy — with the physical conditions that obtain, and so his study of physical laws and of optics leads him to a study of what he calls 'the radiation of the imagination' — the way the imagination forms objects where they



do not exist and can shape and alter experience phantasmagorically. 'The efficient cause of such phenomena,' he writes, is 'the material radiation of phantasy, apprehending external things through vehement imagination.' He discusses maternal impression, the idea that the mother's mental experiences can affect the development of a foetus: in the most coarse terms, that an expectant woman, startled by a goose or a horse, might imprint the creature's features on her child. He realizes it has no basis in physiology. But he argues differently with regard to psychology.

Kircher presents the case of a man in the grip of melancholy : this black stuff of the melancholic humour, 'acts as a kind of mirror', a surface on which impressions are reflected — and transformed. Kircher develops specific metaphors for this operation of fantasy, and they will prove key images in later concepts of imagination: the dark chamber in which phantasms materialize, and the mirror of the mind which reflects them. 'Thus, as external colours,' he writes, 'transmitted through a pierced aperture into the darkness, acquire an external existence, so extrinsic things, transmitted by a strong and vehement understanding... into the nebulous and vaporous medium of the brain ... move the fantasy according to what they relate.' 'Melancholia,' he continues, 'cooked by long meditation of the seething mind, and brought into the brain and adhering there, obstinately, pertinaciously, as in a mirror, reflects back the things brought to the fantasy, while the intellect and the dominion of reason are meanwhile bound by the turbulence and filth and dullness of the spirits.' (Kircher was not alone in his time in linking the imagination's capacities with mental illness; Thomas Hobbes in *Leviathan* also attributes 'dreams and apparitions' to 'the distemper of some of the inward parts of the Body'.)

Kircher then turns anecdotal and instances the case of a man who suffered from the melancholy delusion that he had grown a pair of stag's horns. A doctor was able to cure him, Kircher tells us, by believing his story, and taking a knife and operating on the horns in a serious pantomime of make-believe: 'The horns cut away,' writes Kircher, 'had the power at once to free the man from his madness.' To demonstrate the potency of the imagination, Kircher also set up a wonderful experiment ('*mirabile experimentum*'), using as his subject — a hen.



Even in birds of little brain the shaping precedence of imagination over experience can be shown, he maintains. He proposed: 'Take a hen and tie her feet together and lay her down on the floor and hold her until she stops fluttering in protest; then loose her bonds, but draw, on the floor beside her, a picture of the cords that tied her.' 'The hen,' Kircher declares, 'will lie quietly, utterly persuaded that she is still tied fast by the mere illusion of the cord, even if you attempt to stimulate her to fly away.'

As in Fludd's model, the imagination is an active agent, with strong — indeed even autonomous and ungovernable - powers to shape not only the fantastic lineaments of objects as they appear on the screen of the inner eye but also change the person's own perception of self. But Athanasius Kircher, who was after all a Jesuit, concludes his speculations with a severe warning, founded in orthodox Christian teaching, that the soul cannot wander abroad on its own or leave a dreamer at night, nor can the imagination change the actual condition of matter; imagination is homeopathic, it works only on its like, on imagination itself, producing fantasy, not reality - he thus issues a palinode, confirming the delusory character of constitutive imagination, as in maternal impression.

III

First *Pencil of Light image

Julia Margaret Cameron's series of photographs about her chosen medium, made in 1870, are called The Pencil of Light and they are profoundly steeped in a Neoplatonist view of the origin of imagination and its activity in the world below. From the poets in her circle of close and passionate friendships, she perhaps absorbed the predominantly continental, indeed German, interest in these arguments, for their lingering influence shapes her more optimistic, Christian revisioning. Cameron's assertiveness about the truthfulness of her medium reclaims reflection and duplication from Platonist dismissals. She shows the propulsive, dynamic radiance of light's action, as directed by the photographer. Flurries of ethereal vapours descend from above, like the shower of gold in the story of Zeus's rape of Danae, and a blaze burns the slate angled by the putto to catch its radiance. In this photography, divine shining shoots out of the object in order to make it appear, as the ray or 'the Pencil of Light' emanating from the energy of an eros or divine daimon, to inscribe its form on matter.



Cameron is responding directly to Fox Talbot and *His Pencil of Nature* of 1844, and the change registers a crucial claim on her part, since it is she who is directing that blaze that delineates the picture. Whereas Fox Talbot acclaimed the new medium precisely because it abolished the author of the image, substituting Nature herself instead of the artist, Cameron reclaims authority. The putto here, one of Cameron's androgynous child subjects, is modelling for her, but the mise-en-scene conforms to an older metaphysical optics, analogous to Kircher's vision of its role in bridging physics and metaphysics, with Cameron angling and controlling the play of light on the faces and forms of her sitters in the place of the erotic energy here personified.

An analogous model of psychological relations explains that belief in maternal impression, and interestingly relates it to other impressionable states, such as hypnosis and trance. While maternal impression used to be soundly derided, the new emphasis on the mother's state of being during pregnancy has sparked fresh inquiry into the symbiotic relation of mother and child. The psychological element cannot be altogether split off from the physical: for example, women obviously smoke for emotional and mental reasons. Conceiving of photography as a latter day practice of maternal impression does not simply offer a metaphor for Cameron's projective vision. It colours her activity as a masterful, demanding, turbulently emotional artist in relation to her subjects – especially the flock of younger women, children and infants, who include her own sons, daughters, and adopted children. She mothers her images of them, if one takes mother here as a matrix which patterns and structures its objects, functioning as a motherlode, mother-of-pearl, and even the 'mother' necessary to turn wine into vinegar.

In connection to consciousness and modelling its projections, Cameron's work also bears out the argument for photography's paradoxical relationship with the invisible. The formal and aesthetic manners of Cameron's art, in its most potent and lingering images, help capture, through a process of imitation, the imagination's mobile, anarchic, and above all imprecise ways of picturing.

* Cecy Tennyson with butterfly

* Annunciation

Her blur



\ red images and different length of focus within one image consciously forestall that mortuary stillness of the Carte de visite portrait or Peach Robinson's deathly tableaux, which she specifically deplored. But these characteristics of her style also reproduce the flickering, fugitive indeterminacy of thought – the way images in memory lack definition especially at the edges, how remembered faces or scenes move in and out of focus with gaps and lesions, how mental picturing possesses uncanny clarity and presence while simultaneously jumping and wobbling and eddying.

Cameron praised David Wilkie Wynfield for reproducing human vision and creating effects of movement and partial glimpses. She enfolded the fantasies of her inner eye, or those of her friends, like Tennyson's and spirit photographs extended this activity, finding in photography the potential to attain that knowledge of invisible natures that had eluded humanity hitherto. Spirit photography was already under way during Cameron's lifetime, and in the decade following her death in 1878, it spread far and wide. Photography then played an inestimable role in disseminating the *mise-en-scène* and conduct of mediums, as well as offering a deep metaphor for the relation between external matter and immaterial thought.

Elaine Scarry, in *Dreaming by the Book*, a highly original study of the mental processes activated by reading, draws on the thesaurus evoking the essential filminess of mental imaging, on the gauziness and transparency, vagueness and mistiness, spectrality and screen-like projected thinness. Writing about Proust's recapturing of memories, and other writers', she argues that they are aiming at duplicating the phenomenology of perception, and she comments, 'It is not hard to imagine a ghost successfully, she writes. What is hard it successfully to imagine an object, any object, that does *not* look like a ghost.'^{xv}

The vagueness at the edges of Cameron's compositions, her famous out of focus blurriness, her smudges, wispy traces and haloes combine to etherealise the bodies and faces she unclothes for our gaze.

* Kiss of Peace

Her repeated juxtapositions of faces in close and tender contact with each other and close up to our own vision also reproduces the processes of dream or reverie, in which relationships of scale are disturbed.



* In the haunting and justly famous icon, 'The Whisper of the Muse', George Watts's face crowds the frame, making him loom, apparition-like; similarly, with the others of her celebrated portrait heads. Scarry, again, points out this aspect of mental picturing, that it fills the field of vision, edge to edge: in dreams, when someone appears and is recognised, it is not uncommon for them to rise up in the mind's eye as the only subject of its concerns

Photography as impressions of mental powers, as translations of thoughts into images: this conception of the medium shaped the trust Victorians placed in spirit photographs. Official, mainstream culture, as represented by Tennyson, the Poet Laureate who went to tea with the Queen, was not hermetically sealed against what would perhaps be seen now as the margins, where psychic psychology, ghosts and the occult were thriving. The roster of eminent Victorians who attended séances is truly impressive, though some, like the Robert Browning and Elizabeth Barrett Browning took very different positions, Robert denouncing psychics as charlatans, in a coruscating diatribe, 'Mr Sludge the Medium'. But Tennyson used to hypnotise his wife to help her sleep, and towards the end of his life he became a member of the Society for Psychological Research, and tried to conjure his dead son Hallam. The pioneering American photographer William Mumler discovered a 'spirit extra' on his plate in around 1865, and thereafter the tricks the photographic process was capable of playing were zestfully exploited – in both still and moving pictures. These photographs picture the dead, but not in person as ghosts, but as prints of thought emanating from the subject in symbiosis with the photographer: the latter had to possess mediumistic powers in order to capture the images in her sitter's mind and project it on to the plate, and these phantoms or thought prints would appear like thought balloons above the subject's head. The activity becomes twofold: first the sitter is able to thrust his or her object of desire and longing into the material world, where the camera, in the hands of a mediumistically gifted photographer is able to perceive it; the camera plate then doubles its subject as in a mirror.

- Frederick Hudson, Mr Reeves, 1872
- Paul Nadar Jules Bois, c. 1900

The camera reproduces spectral form in a manner that provided nineteenth-century metaphor for thought itself. One writer commented, 'the mind 'daguerreotypes' the flash of thought — on the retina, or mirror of the eye, where it is recognized by the powers of



perception.’^{xvi} The psychic photograph analogously extended this process, making an image of ectoplasmic phenomena extruded by the spirit. F.W.H Myers (c. 1895), one of the founders of the Society for Psychical Research in London in the 1880s, and a key figure in the history of occult psychology, wrote: ‘... the pervading unity of things remains incognisable (sic) to [the Adept] him save as an indwelling essence, which is the soul of his soul. ... he has obtained an experimental insight into that “mind-stuff”, whose existence we can only conjecture; he has half bridged over the gulf between objective and subjective, by actually learning to see his own thought, his own will...’ He goes on to develop the metaphor of projection and photography in terms Kircher might have liked: ‘... we are projected as images from the unmanifested unity of things.’^{xvii}

A contemporary of Myers and an enthusiastic collector of such photographs, who made up several albums and deposited them with the Society for Psychical Research [in 1953 aged 94], [Mr Warrick] considered all psychic photos were ‘*memory pictures exteriorised*’ & that in the future doctors will be able to read the brain in post mortems & thus “see” the individual’s memories.’ Ectoplasm acted as a kind of developing agent, which made possible the impression, as in a print or cast, of the projections of impalpable, imponderable, light and other immaterial forms from the mind of the medium. Sir Arthur Conan Doyle, inventor of that hero of deductive reasoning, Sherlock Holmes was one of the most enthusiastic supporters of materialising mediums. In his *History of Spiritualism* in 1926 Conan Doyle claimed ‘The ectoplasm pictures photographed by Madame Bisson and Dr. Schrenk-Notzing ... may in their first forms be ascribed to the *medium’s thoughts or memories taking visible shape in ectoplasm.*’^{xviii}

- William Hope, in England was under stringent examination from the ghost-buster Harry Price when he summoned up the ghost of Conan Doyle for this image of around 1922 -

Spirit photographers continued to work successfully, in spite of numerous exposes and many pranksters: Around 1908, Jacques-Henri Lartigue spoofed ghost photography by exaggerating the spectre’s spectrality and mocking the poltergeist’s reputed limber antics:

*Zissou en fantome (2) *

In Germany, one of Mesmer’s followers, Karl von Reichenbach (1788-1869), proposed an invisible and imponderable force analogous to Mesmer’s earlier theory of



animal magnetism. Reichenbach was no negligible scientist: in the 1830's he discovered paraffin and creosote, then retired with his chemical fortune to concentrate on electro-magnetism, the most exciting mystery in physics in his time. He called the force he identified the 'Od' and in a series of articles in 1845, declared it to be a different form of light, one transmitted by magnetic force especially from crystals. He was translated the following year into English, and Elizabeth Barrett Browning, for example, became an enthusiast.^{xix} By means of subjects he called 'sensitives', Reichenbach saw – and took photographs of – Odic lights and Odic smoke in darkened rooms, as they radiated from magnets his collaborators held and energized – their touch providing the crucial contact between the empirical realm and the ethereal. Dancing balls of radiance and flaring haloes around gifted mediums became a feature of early spiritualism, itself from the 1840s. Such photographs became the most popular documentary proof of spirits' real presence. Psychic images, in which spiritual bodies manifested themselves as ectoplasmic smudges, haloes and phantoms, appeared to guarantee the truth-telling of séances.

In Paris, also in the 1890s, Reichenbach's 'Od' or vital force inspired another enraptured experimenter, the doctor Hippolyte Baraduc, to tap psychic energies and record them in an exquisite series of *Epreuves*, or Proofs (in the double sense of trial and confirmation). His first book, published in Paris in 1896, appeared in 1913 in an English version, *The Human Soul, Its Movements, Its Lights, and the Iconography of the Fluidic Invisible*. It included an album of his remarkable photographs, which were taken, he wrote, without apparatus, by direct application of the sensitised plate to the electrically emitting sensitive mediums. It was this 'force speciale, mode intelligentié de l'éther' ('special force, the intelligenced mode of the ether') which caused the emanations that were recorded in his photographs: 'La force vitale est de l'intelligence en mouvement concrétant de la matière.' (The vital force is intelligence in movement rendering matter concrete.) (IN 1904 he published a sequel, concentrated on picturing invisible vibrations. *Les Vibrations de l'ame humaine.*) ()

The Southern Italian medium Eusapia Paladino, who became internationally sought after for her psychic powers, emitted her thoughts onto some kind of malleable stuff: these were her celebrated ideoplasts. (Experiments in 'thoughtographs' of this kind continued: in



the Sixties, a Chicago hotel worker, Ted Serios, was able to concentrate mentally on an image and communicate it onto Polaroid film, in the course of an heroic and physical struggle.)^{xx}

As Tom Gunning has so brilliantly perceived, Spiritualist séances beginning in the 1870s, featured a medium closely reproducing the very circumstances of photography, taking the place of the camera itself.^{xxi} In the dark chamber of the séance customary setting, the medium was seated inside a hooded and curtained cubicle*.

* Sometimes the medium – here Margery Crandon - was even imprisoned in a black box, where she received projections from the unseen realm, other forms of energy as light, which in turn imprinted themselves on a material offered either by the séance participants for their reception:

- Eva Carriere printed portraits on to ectoplasmic structures she exuded from her ears or her breasts, in the photographs taken by Juliette Bisson and Albert Schrenk-Notzing in the 1910s.

* This anonymous medium, similarly possessed powers of imprinting images onto spirit stuff.

- These faces of the departed appeared in ectoplasmic webs like Christ's image on the miraculous veil of Veronica.

The subjective origin of these images and the psychological interactions between people's imaginations which gave rise to their elaborate creation and performance troubled participants and did not command confidence among audiences. The general desire for objective knowledge, the higher status of fact and reason fell upon photography as a guarantor of these desiderata; by defining the medium as the register of memory and of record, psychic researchers could grasp at outside evidence for their perceptions. The Pencil of Nature offered a warranty of truth which the Pencil of Light failed to achieve: one transcribed reality seen by a trustworthy mechanical eye, the other illusions conjured in the mind's eye. So the dreamwork of the camera in its early history became obscured. Séance photographs and ectoplasmic production were mistakenly taken for real proof that 'the truth is out there'; all along, however, some makers of images had reversed the direction of

images' travel, and grasped that the camera was a supreme instrument for beaming out there into the real something that originated in the eye of the imagination.

I can easily believe, that there are more invisible than visible Beings in the universe. But who shall describe for us their families? and their ranks and relationships and distinguishing features and functions? What they do? where they live? The human mind has always circled around a knowledge of these things, never attaining it. I do not doubt, however, that it is sometimes beneficial to contemplate, in thought, as in a Picture, the image of a greater and better world; lest the intellect, habituated to the trivia of daily life, may contract itself too much, and wholly sink into trifles. But at the same time we must be vigilant for truth, and maintain proportion, that we may distinguish certain from uncertain, day from night. -- T. Burnet, *Archaeol. Phil.* p. 68 (1692) ; see Jennifer Lord, *Coleridge on Dreaming: Romanticism, Dreams and the Medical Imagination* (Cambridge, 1998)

ⁱⁱ Joel Snyder, 'Picturing Vision', *Critical Quarterly* 6 (1980), 499-526.

ⁱⁱⁱ Frederick Burwick, *Romantic Drama From Optics to Illusion, from Literature and Science: Theory and Practice* ed. Stuart Peterfreund (Northeastern University Press: Boston, 1990), pp 167-208:p 182.

^{iv} Jacques Derrida, 'The Deaths of Roland Barthes', in H. J. Silverman, *Philosophy and Non-Philosophy Since Merleau-Ponty*. (Thanks to Mark Dorrian for this.)

^v Coleridge expressly distinguished between Imagination and Fancy:

'Imagination was that reconciling and mediatory power, which incorporating the reason in images of the sense, and organising (as it were) the flux of the sense by the permanent and self-circling energies of the reason, gives birth to a system of symbols, harmonious in themselves and consubstantial with the truths of which they are the conductors.'

^{vi} Samuel Hibbert, *Sketches of the Philosophy of Apparitions*, Edinburgh and London, 1825 - dedicated to Sir Walter Scott.

^{vii} *Cornhill Magazine*, July 1862, cited by Kate Flint, 'Painting Memory', paper kindly lent by the author

^{viii} Mathew Arnold, They sleep in shelter'd rest ...

^{ix} Nicky Bird's work, in her book *Tracing Echoes*, drawn on the Herschel Album, explores lineage and memory and family photographs turns the images into prophecies, not only mementoes. She reads Cameron's portraits through the lens of their descendants, actual and fancied or ascribed – Isle of Wight inhabitants with a look of Cameron's models, sometimes very acutely captured – inspiring an 'uncanny double take'. She cites Barthes' idea of the truth of lineage. So the photograph becomes proleptic, not only nostalgic – an effect rather like Pierre Menard, when the text makes its own future story. 'future memories' as in the Calvino story 'Adventures of a Photographer.' Bird's genealogical research restores personal histories and identity to the models in allegories or fictions. This results in deepening the link of photography with archiving, rather than imagining – in spite of the uncanny inversion of time that also takes place, the movement forward into the future.

^x Victoria Olsen, *>From Life: Julia Margaret Cameron and Victorian Photography* (London: Aurum, 2003), gives a remarkable account of the family's improvidence – their combination of generosity, borrowing, and hand-to-mouth existence.

^{xi} Jean Michel Massing ' >From Manuscript to Engraving: Late Medieval Mnemonic Bibles', in *Ars Memorativa* Eds Jorg Jochen Berns and Wolfgang Neuber Tubingen 1993, 101-115: 102 ; medieval physiology followed the dream psychology of Avicenna: see Massing on 'Durer's Dream', p 239)];

^{xii} This was God's signature in his handiwork. Kircher's eclectic accumulation of God's wonders in his private museum was recorded in a magnificent illustrated catalogue, made by Francisco Maria Ruspolo and published in Rome, 1709

^{xiii} The initial invention of the instrument is now attributed to a contemporary of his, the brilliant Dutch horologist and astronomer Christiaan Huygens.)

^{xiv} *Ars Magna*,

^{xv} Scarry, *Dreaming by the Book*, p 24

^{xvi} Terry Castle, *The Female Thermometer*, p. 179.

^{xvii} F.W.H. Myers, Note, First Report of the Committee of the Society Psychical

Research, appointed to investigate the evidence for Marvellous Phenomena offered by certain members of the Theosophical Society. N.D.

^{xviii} OED, citing Conan Doyle, *History of Spiritualism*, 1.v. 114, 1926.

^{xix} See Elizabeth Barrett Browning, *Collected Poems*, p 653-4 (I am grateful to Margaret Reynolds for the reference).-

^{xx} Dr Jule Eisenbud, *The World of Ted Serios: Thoughtographic Studies of an Extraordinary Mind* (New York, 1967); see Mark Alice Durant, 'The Blur of the Otherworldly', *Art Journal*, Fall 2003 pp. 6-15.

^{xxi} Tom Gunning, 'Phantom Images and Modern Manifestations Spirit Photography, Magic Theater, Trick Films, and Photography's Uncanny' in *Fugitive Images From Photography to Video*, ed. Patrice Petro (Bloomington, Indiana University Press, 1995), pp. 42-71; see also idem., 'Haunting Images: Ghosts, Photography and the Modern Body', in *The Disembodied Spirit*, catalogue edited by Alison Ferris. Bowdoin College Museum of Art, Brunswick, Maine, 2003, pp. 8-19.