

## Life Light: Explorations in Alchemy and the Magic of Enlightenment

Annette. J. Burfoot

*A Choice Collection of Rare Secrets and Experiments in Philosophy. As Also Rare and Unheard of Medicines, Menstruums, and Alkasefts; with the True Secret of Volarilizing the Fixt Salt of Tartar. Collected and Experimented by the Honourable and Truly Learned Sir Kenelm Digby, Kt. Chancellour to Her Majesty the Queen-Mother. Hitherto Kept Secret since his Decease, but now Published for the good and benefit of the Publick, 1682.*

**T**his long-winded title to an alchemic treatise of one Kenelm Digby, Knight and Chancellor to the Queen-Mother in seventeenth-century England, reveals a desire for control. The passage evokes a romantic, medieval image of the alchemist in his (female alchemists are unheard of) musty, dim-lit lab of creation that is littered with ancient texts and florid code, weird contraptions and amorphous flasks



figure 2.

filled with strange fluids that refract the glow of candlelight and the ever-present furnace through the gloom. Images such as the one caught by Hendrick Heerschop in 1671 [fig. 2], illustrate an ancient and honourable order of alchemists in its attempt to recoup traditional philosophies of creation and control in the face of the scientific revolution, led by Decartes, Bacon, et al., and its alleged crusade against magic and mystery.

Professor Robert Winston, a British *in vitro* fertilization (IVF) pioneer, recently knighted for his work in advanced reproductive medicine, describes how he participated in the twentieth-century version of the creation and control of life:

We read all the papers on the subject.... We had the advantage that we have superb endocrinology here and I still think that endocrinology is the key to success in IVF. We felt that if we could provide eggs of very good quality it would be possible to get them fertilized. And so it turned out.... [We also looked] at the media that the

embryo is in in the fallopian tube. The object there really is to try and compare what is happening in nature with what is happening in culture in vitro....

Our third area...which is again quite distinguished, is the area of preimplantation diagnosis.... This is potentially a new era in human biology because what we are trying to do is to diagnose genetic disorders in embryos before they are transferred to the uterus using biopsy on a micromanipulator and then assaying enzyme levels in that single blastomere, sexing the embryo or looking at carrier types or looking at DNA.<sup>1</sup>

Exacting discourse, the bright light, the test-tube phallus, and the crystalline views provided by steel microscopes and micromanipulators that pass through women's bodies to capture essential reproductive matter replace the amber caves, belly-like vessels and the viscous fluids of the dark science of the alchemist, imbedded in what we call myth, meaningless ritual, and imagination. Yet, the alchemist and the IVF pioneer imagine life and its significance in remarkably similar ways. The desire to distill and control life-making fills the now-Disneyfied alchemic science that reaches back to the start of the first millennium, and was widespread throughout the world, West and East. This alchemic imagination is also an epistemological origin for modern scientific method and, particularly, for reproductive and genetic engineering. The following pages trace several manifestations of light as life from *in fornix* to *in libris* — from the furnace of the alchemist to the library of the Human Genome Project: masculine alchemic principles of transcendence through the working of material with light and heat; the dark, flesh-bound practices of women witches; the scientific revolution and its enlightened view of a world apparently free of such earthly bonds and dim views; and a world of a brilliant and all-pervasive vision that obliterates the body and illuminates a microscopic reproductive world devoid of women.

## **Ex Fornix**

Once on a time, when I had begun to think about the things that are, and my thoughts had soared high aloft, while my bodily senses had been put under restraint by sleep... there came to me a Being of vast and boundless magnitude, who called me by name, and said to me, "What do you wish to hear and see, and to learn and to come to know by thought?"

... "I would fain learn," said I, "the things that are, and understand their nature, and get knowledge of God."

...I beheld a boundless view; all was changed into light, a mild and joyous light...  
And in a little while, there had come to be in one part a downward-tending darkness, terrible and grim....<sup>2</sup>

Hermes Trismegistus —“the thrice-blessed”— is the name to which is attributed the some forty-two fundamental books of the Egyptian religion, known together as the *Hermetica*.<sup>3</sup> These texts concern both “popular” and “learned” matters, such as cosmology, medicine, geography, pedagogy, chemistry and alchemy, and form the basis of the broad-based and typically Greek philosophy of Hermetics. Hermetics shared with early Christian Gnostics, Cabalist Jews and other occult philosophers, the belief, central to alchemy, that knowledge (*gnosis*) is not knowing of God but becoming one with God.<sup>4</sup> Often described as an art, alchemy provides some of our earliest scientific methods. It can be viewed as the practical application of occult philosophy (a theory of the elements) and stems from popular hermetics, an application most pronounced during alchemy’s own renaissance just preceding and during the European Renaissance.

Paracelsus (1493-1541), an important figure in alchemy’s renaissance, participated in the popularization and lionization of the Classics; his education brought him within the circle of contemporary alchemists, particularly Cornelius Agrippa, the author of *De Occulta Philosophia*; he was a trained miner and served as an army surgeon. His descriptions of the “secrets of Alchemy” mirror this split vocation, typical of alchemists of the time, and evoke the necessary conditions for the alchemist’s progress — namely, the mystery, power and origin of the prime creative force: “When any man desireth thoroughly and perfectly to learn this Art from its true foundation, it be necessary that he learn the same from the Master thereof to wit, from God, who hath created all things...”<sup>5</sup> The alchemist’s desires are not confined to understanding how the universe works; he desires to participate in its creation. His meticulously detailed descriptions of the prime elements — metals, fire, water and air — and celestial bodies tell of their interwoven natures and their physical and spiritual qualities. Theories of interaction between metals, fire and water are carefully laid out, and practices of making tinctures and distillates are revealed:

Whosoever desireth to have the tincture of Metals, he ought to take the Philosophers Mercury, and let him cast the same into its own end, that is into quick Mercury.... For there is like concordancy between these Mercuries, as is between Male and Female.... The body of Sol [Philosopher’s Mercury] remaineth firm and fixed in the fire; but the quicke Mercury is not fixed.... Tinctures do spring out of mettals, that is, out of the Philosophers Mercury, and not from the quicke Mercury....<sup>6</sup>

Key to these transformations is the furnace: the machina which combines the spiritual with the physical and thus bridges the worlds of mind and matter,

Mercurius Hermes Trismegistus, saith, That he which would perfect this Art, must, as it were, build a new World; for after the same manner as God created the Heaven and Earth, the Furnace with the Fire is to be built and governed. That is to say, after this manner: First, let there be a Furnace built of the height of six spans...; in the inside, let it be round and plain, lest the Coals cleave unto it.<sup>7</sup>

The process of becoming knowledgable and one with the ultimate creative force is a progression from the potential world of ideas to actuality, or Platonism in reverse. Central to this process is *astrum*, a form of praxis between knowing and doing that promotes the maturation of the alchemist not through book learning, but through the experience of transforming what is known into the realm of action: wisdom lies in the materialisation of idea. Paracelsus argued that knowledge is essential to men and given them by the stars (a common symbol for *astrum*). The *Hermetica* presents a description of the philosopher's encounter with Poimandres, God, as a meeting of mind where Poimandres reveals to Hermes that his mind contains the archetypal form, "which is prior to the beginning of things, and is limitless.... Learn my meaning...by looking at what you yourself have in you.... For life is the union of word and mind."<sup>8</sup>

This philosophy of knowledge is clearly repeated in the Christian myth of transcendent recreation where the word — articulation and meaning — is God. It is this word that impregnates the Virgin Mary to give earthly life to the Son of God: Supreme idea is transformed into Messiah. The coincidence was not lost on those eager to resurrect occult philosophical principles during the Christian-dominated medieval and renaissance periods in Europe. In *The Archidoxes of Magic*, Paracelsus introduces alchemy, along with other "secrets," "mysteries," and "celestial medicines," with "Having first invocated the Name of the Lord Jesus Christ our Saviour, we will enterprise this Work."<sup>9</sup> In this marriage of traditions, it is man's duty to learn how to reveal the mystery and to transform the God-given materials in order to be one with God: To walk with Christ not only in love for one's fellow beings but in the engineering of the natural domain; to be co-creator. In the beginning was light to show creation and the way to create: Hermes asks to see and is greeted with a god-given "joyous light" when introduced to the mysteries of creation and being one with God. Seeing is both the revelation of mystery through word and mind and that which is revealed by the glow of the transformative furnace: the place where the material is worked.

This discourse on light also occludes. After satisfying his reader that he is a Christ-

ian, Paracelsus continues by distancing himself from those practices that work “against nature” namely witchcraft. This distinction opens his chapter on celestial medicine which begins with the problem of male impotence: “The loss of Strength and Virtue in the Members of Generation...”<sup>10</sup> During the witch hunt in Europe, which was active in Paracelsus’ lifetime, male impotency often served as proof of sorcery at the hand of an accused witch who was typically a woman. Paracelsus joins the hunt in acknowledging that some forms of impotence are caused by such dark forces and require special measures from his white magic:

But when it happens that this Disease is brought upon any one by Witchcraft, or some Diabolical Art.... Let the Patient take a piece of Horse-shoos found in the high-way, of which let there be made a Trident-Fork....<sup>11</sup>

Necromancy was viewed as a particularly abhorrent practice engaged in by witches: it was, after all, a practice which mirrors that of the alchemist. Necromancy emerged from ancient, non-threatening practices of prophesying from dead bodies, including human remains; however, as mono-theistic religions, especially Christianity, laid claim to the body as God-given, its manipulation, dead or alive, was viewed as tampering with sacred material. For instance, *Macbeth*’s “weird sisters” are perhaps the best known of the Jacobean renderings of witches’ dreadful, putrid and fearful necromantic powers; but, as Gary Wills’ book *Witches and Jesuits* reveals, there was a bounty of contemporary portraits of the witch as necromancer, such as this passage from John Marston’s *Sophonisba* (1606):

From half-rot cerecloths then she scrapes dry gums  
For her black rites. But when she finds a corse  
*New* grav’d, whose entrails yet not turn  
To shiny filth, with greedy horror then  
He makes fierce spoil, and swells with wicked triumph  
To bury her lean knuckles in his eyes.<sup>12</sup>

### **Transmutation: matter, spirit, sex**

And thereafter I saw the darkness changing into watery substance, which was unspeakably tossed about, and gave forth smoke as from fire; and I heard it making an indescribable sound of lamentation; for there was sent forth from it an inarticulate cry.<sup>13</sup>



figure 3.

In this description of a proto-alchemical context, Hermes' inarticulate, watery darkness is reflected in a denigrated and coveted view of women and female procreativity that is placed on view and *in vitro* for the purpose of a male reproductive imaginary. The female form in alchemy commonly represents the *prima materia*. Michael Meier's treatise *Atalanta Fugiens* (Atalanta Fleeing) (1618) contains the emblem *Nutrix ejus terra est* (The Earth is its nurse) in which an image of a woman whose body swells into the globe between her neck and groin. The body as globe suckles a human infant as a sign of the conjunction between *mater* (mother) and matter [see fig. 3]. The other common use of the female form is that of a young woman copulating with a man of about the same age, an embrace signifying reproductive force transferred from human behaviour and experience into alchemic principles of transmutation. In Johann Daniel Mylius' *Anatomia Auri* (1628) alchemic glass vessels are drawn to represent the key steps of transformation: "conceptio and praegnatio" [see fig. 4]. The accompanying



figure 4.

creative juices to the creature which also requires her death and is in turn used to achieve the much loftier alchemic transmutation [See fig. 5] :

In the First Work, this sinister injunction, here illustrated, translates as the feeding of the Sulpher (the Toad-Child) of the Philosophers with the milk (Mercury) of the matter or subject. The death of the woman, corresponding to the important axiom “Kill the living to revive the dead,” signifies that the initial Matter dies in the Dissolution that produces the Milk (Mercury) upon which feeds the embryonic Sulpher - hitherto described as dead because initially it (Sulphur) was but a latent potentiality within the grave of Matter.<sup>16</sup>

### New Lights, Old Forms

But from the Light there came forth a holy Word, which took its stand upon the watery substance; and methought this Word was the voice of the Light.<sup>17</sup>

The scientific revolution and its rallying cry to empirical method as the most effective means of controlling the natural environment attempted to sweep aside the dominant occult philosophies and alchemic practice along with the broad-based, local practices of healing and attending to the body. A battle was fought again over the territory of truth where ancient myths and religious-based philosophies gave way to the new science

text explains the emblem’s meaning: “The sexual embrace of the purified Principles causes pregnancy, which... is a Volatization of the Fixed. The Female or Mercury absorbs the Male. As their bodies then dissolve, merging into unity, a bluish colour appears briefly before receding...”<sup>14</sup> The woman’s body, *in vitro*, is used to represent both stages of transformation but disappears once the desired distillations, tinctures, and re-combinations appear. Human forms in the guise of a king and a queen are reintroduced to indicate the type and significance of the transformed materials: the king represents “medicine of the first order” and the queen, “medicine of the second order.”<sup>15</sup> In *Atalanta Fugiens* a woman proffering her breast to a toad symbolizes the transfer of her cre-

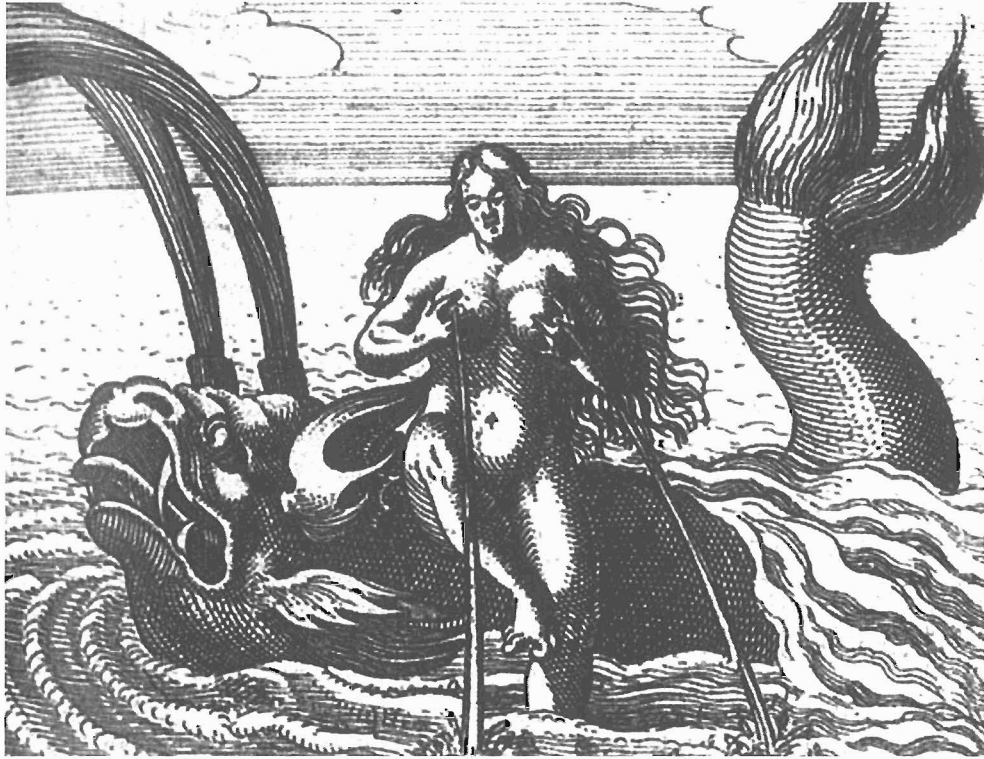


figure 5.

based on observation and controlled experimentation. This pursuit of a completely objective and value-free truth, of course, was riddled with its own ideological formations and artfully obscured as such by positing relationships with selected earlier methods. The seed theory of procreation (reproduction, *per se*, does not enter the discourse until the eighteenth century), which persisted well into the seventeenth century, is based on Aristotle's notions of human generativity which portrays women as the vessel and provider of material only and the male as the giver of form, reason and spirit to the material. The early scientific claims for the homunculus and animalculism were also "regenerated" in the seventeenth century when one Anthony van Leeuwenhok espied through a microscope the fully formed human in semen [see fig. 6]. Due to the predominance of the one-sex model, and with an old shadow of the necromancer's practice hanging about the well-lighted laboratory, the scientific and pedagogical value of women's reproductive organs, even after dissection, was read in terms of male generativity, with ovaries as inferior testes and the uterus as a penis [see fig. 7].

As the new scientific discourse replaced earlier ones, including alchemy, the body, especially the female body, became increasingly the object of a new male gaze of the



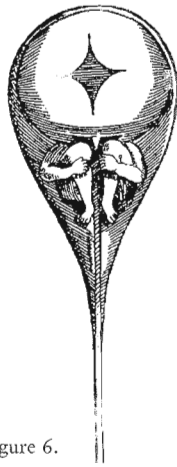


figure 6.

growing medical profession. However, the transition from a chiefly philosophical reproductive imagination to a very practical one did not occur without resistance. Because of such a long history of midwives' attendance of the body, particularly with pregnant and birthing women and the conjoint practice of home and herbal remedies for common ailments and complaints, these areas were the last to be formulated through medical discourse. Waiting for a labouring woman to give birth and providing relief from lumbago were not themselves worthy enterprises for the new profession of doctors and men of science; rather, the value lay in providing insight as theoretical context, as well as an explanation of the components and functions of the body and a means to control them.

### Turning up the lights

"That Light", he said, "is I, even Mind, the first God, who was before the watery substance which appeared out of the darkness; and the Word which came forth from the Light is Son of God.... Learn my meaning... by looking at what you yourself have in you; for in you too the word is son, and the mind is father of the word.... For life is the union of word and mind."

The world of new reproductive technologies and genetic engineering is one which perpetuates the distinction and hierarchy between enlightened mind and dark, inarticulate matter that alchemy and its hermetic tradition celebrated ages ago. The fascination in the reproductive force of nature has zoomed from the scientific revolution's early fascination with simply revealing human reproductive components to the naked eye (dissection, surgery, x-rays, ultrasound and chemical assessments) to micro-manipulations *in vitro* (IVF and the micro-implantation of sperm in an egg, for example) and the codification of human-being *in libris*. Once again, the body, particularly the female body, serves as a natural resource for the exploration of scientific minds. The wonder and magic of these recent developments does not lie in the reproductive power of the human body or even its wondrous genes, but in their manipulations by human hands guided by scientific principles of unhindered exploration and control. This is the working of reproductive matter in laboratory-furnaces, which replace wombs, to transmute the raw material into higher forms and to shed light on the matter and enlighten the scientific enterprise.

*The twelfth Figure, of the Wombe.*

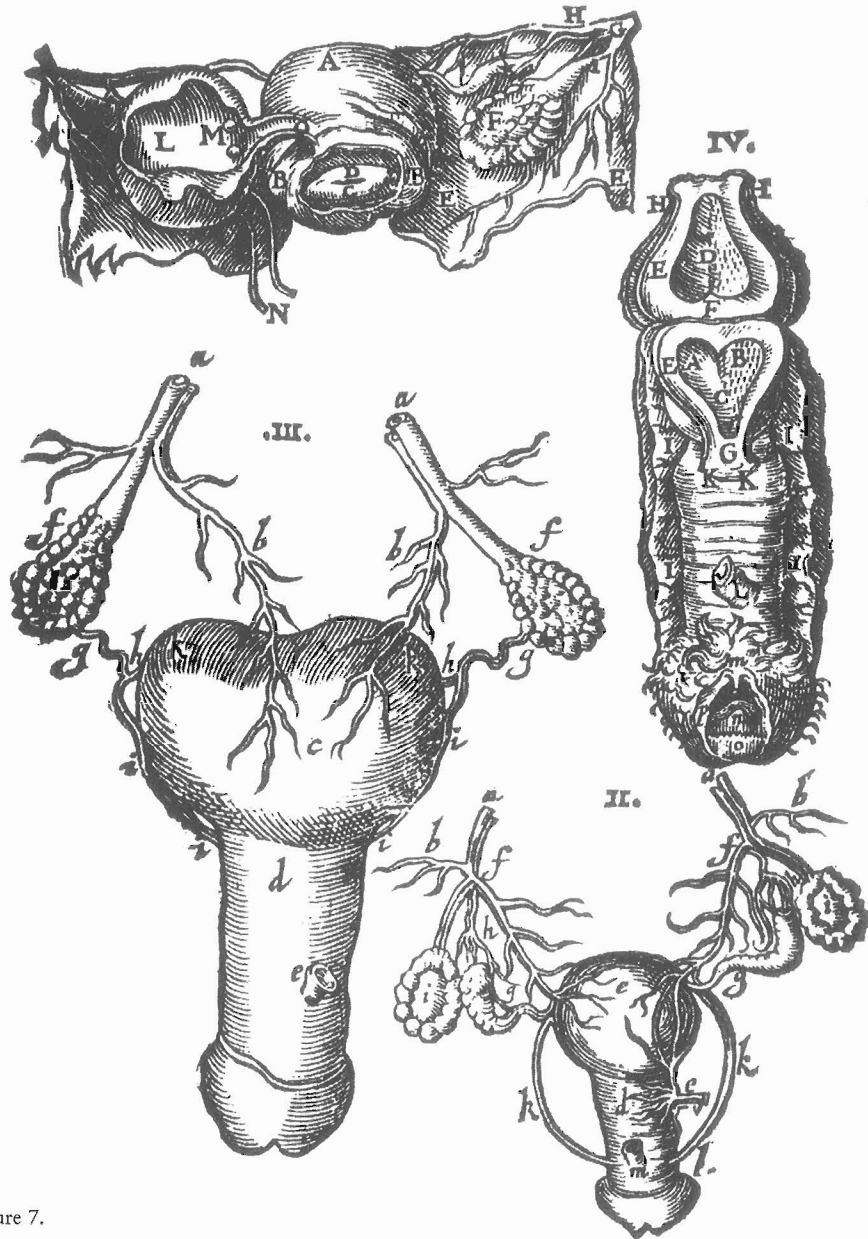


figure 7.

IVF was originally indicated only for women with blocked or missing Fallopian tubes. The indications have now been greatly expanded to include unexplained infertility (whose definition includes a marked reduction from at least two years of “trying” on their own to one year and sometimes to six months). As well, male infertility is also a common reason for placing women through the complex, largely experimental and usually private and expensive procedures. Despite the significant commercial gains and ego satisfaction for IVF doctors who succeed in producing a baby from these procedures (they often describe these babies as theirs), key aspects of the process remain mysterious. This is partly what keeps the magic alive; there remain corporal territories to explore and colonize. Implantation of the embryo in the mother’s uterus is one such place. Like alchemy, the process includes three stages: observation of Nature; visualization and appropriation of her materials; and refinement of the materials to provide a more valuable, man-made product. X-rays of pregnant women, increased obstetrical surgery, laparoscopy and ultrasound, provided the means of observation of female procreativity over the last century. Early attempts in IVF during the 1970’s included grinding Fallopian tubes to provide a medium for the *ex utero* embryos to form. These growth mediums have now been replaced with more “sophisticated” bio-chemical distillations and tinctures. The hyper-stimulation of women’s ovaries in IVF began after the hormonal reproductive functions were more clearly understood (the development of the Pill in the 1950’s and 1960’s, a hormonal contra-ceptive, assisted greatly in this area of endocrine research). Initially IVF was run on “natural cycles” (no hyper-ovulation); but after the increase in establishing pregnancies with the procedure was found to be greatly enhanced when at least three embryos were implanted, hyper-stimulation became the norm. Initially, natural growth hormones were harvested from people and used in the process. These hormones can now be, and are, routinely generated “artificially” in labs. The hormone “cocktails” now used in IVF have also developed in their level of intervention in the woman’s reproductive hormonal cycle. Initially only the activity at the reproductive organ level was involved (as with the Pill); however, it is now routine to suspend all reproductive hormonal activity by interfering with the brain’s signalling function using GnRh analogues. Once this source-level of activity is effectively stopped, the woman’s entire cycle is managed externally with a complex (and expensive) administration of hormones to mimic the usual hormonal ebbs and flows which ripen and ovulate the egg and prepare the uterus for implantation.

The motivation for the increased intervention is control. If cycles are managed externally to this extent, the exact moment of ovulation becomes known and removal of the eggs can be planned according to the availability of clinical staff and equipment. Thus, clinics can handle more cases, more efficiently. Meanwhile, explorations of ecto-genesis

(to bring an embryo to term without a female body) continues around the world. A Japanese doctor has had recent success with lamb embryos:

The debut of Dolly, the cloned sheep, significantly escalated the scientific community's ongoing game of technological oneupmanship. Last May, surgeon Koyo Yoshida, part of a team of Japanese doctors, raised the bar still farther by demonstrating an artificial uterus.... Like all expectant parents, Dr. Yoshida...anxiously awaits the blessed event. At term, he will watch the "birth" — the lifting of the kid's head for his miraculous first breath.<sup>18</sup>

Genetic engineering has always been a close cousin to reproductive technologies. In order to explore human reproduction at the genetic level, scientists required human sex (or reproducing) cells for examination and experimentation. Although sperm cell acquisition is a relatively simple affair, egg cells are more complicated to acquire. An increase in obstetric surgery starting in the mid 1900's allowed such access. Hysterectomies, including the removal of ovaries, became a relatively standard response to "women's complaints" (irregular, heavy and painful periods), an old psychiatric practice for treating neuroses, especially hysteria. It was on the commonality of removing women's reproductive organs in the 1960's that the young English scientist, Robert Edwards, relied to get eggs for his experimentation with hyper-ovulation and, ultimately, IVF in humans. Edwards writes of how he waited outside the operating room of his obstetrician and gynaecologist colleague, Patrick Steptoe, for the ovaries.<sup>19</sup> Although Edwards and Steptoe received world-wide acclaim for being the first to apply IVF successfully in humans, their contribution to the genetic research cannot be underestimated.

### **In Libris**

With the advent of IVF as medical practice in humans, not only did a supply of human sex cells become available for genetic research, but entire human genetic codes were stored in the form of pre-implanted embryos. Although microscopic in size, these embryos contain the entire genetic material of a grown human being. The research potential was enormous and so quickly taken up by geneticists that a large part of the public relations campaign surrounding new reproductive technologies was devoted to rationalizing embryo research. "Spare embryos" is the term commonly designated to this new research material. The term provides a comfortable prioritization to the public: Embryos are primarily for reproduction — all the scientists take is what is left over. Also, a substantial component of the popular science education campaign was designed

to remove public consideration of research embryos as human. The photo prefacing the 1987 annual report of the British Voluntary Licensing Authority is of an embryo the size used in research compared to the point of a pin [see fig. 1]. The term “pre-embryo” was also adopted in Britain to assuage any public concern that a research embryo would feel any pain.<sup>20</sup> Genetic Engineering need no longer worry much about human origin as “watery substance” or about the public disturbed by an “inarticulate cry.” The discourse of genetic engineering has so codified human-ness that talk of replicating DNA sequences and germ-line research does not obviously spell human transmutation. The blinding glare of a scientific promise of immortality yields the genetic vision of life as world without end: there is no death and there is no birth, only endless replication of stored codes.

Although alchemists claimed their project as one of shedding light on Nature’s god-given mysteries it is actually the process of mystification through sacred ideals, secret words and socially-restricted access. Translated into modern science, we find similar patterns of an elaborate obfuscation of a perplexing but unformed terrain of reproductive forces. Reproduction as the mundane experiences of pregnancy, birth and nursing, and female procreativity, has been replaced by much higher ideals of conceptive control that has taken reproduction itself away from the body. Both at the cellular level and as genetic code, this new level of intervention denigrates the gross aspects of reproduction and evokes the alchemist Meier’s notion of women as “the grave of Matter.” It is not coincidence that in the face of these discoveries, the responsibility for pregnancy and birth has finally been returned in some developed nations by physicians to midwives leaving the more valuable explorations to the male-dominated professions of reproductive and genetic engineering. Delivering babies does not match the heady work of determining people and people’s lives.

Those quests — from the pretty to the comic — of the romantic alchemist have become a dazzling scientific endeavour in the name of human salvation. Permission to explore comes from an assumed and unnamed source which is no longer personified as God but is omnipotent in its effect. Salvation, from infertility and from genetic illness, remains the promise. Life has indeed become the union of certain words and some minds which illuminate some things.

## Endnotes

1. Robert Winston, *Interview with author*, 11 January 1988.
2. Hermes Trismegistus, *Hermetica*, trans. Walter Scott (c. 300 CE; Boston, Shambala, 1985), 12.
3. Many erroneously believe that alchemy refers to chemistry. The term “alchemy” is Arabic in origin and stems from the term, *al-Khemeia*, which literally means “matter of Egypt.” *Khemeia* refers to the “land of the moon” and is an ancient name for Egypt. The alchemic reference to *Khemeia* can be traced to ancient Greece, where the work ascribed to the Egyptian god Thoth, was written under the Greek name Hermes Trismegistus.
4. Hermes Trismegistus, 6.
5. Paracelsus, “Prologue,” *The Archidoxes of Magic* (1656; London: Askin Publishes, 1975), [n.p.].
6. Paracelsus, 14, 15.
7. *ibid.*
8. Hermes Trismegistus, 117.
9. Paracelsus, “Prologue”.
10. Paracelsus, 113.
11. Paracelsus, 114.
12. Qtd. in Gary Wills, *Witches and Jesuits: Shakespeare’s MacBeth* (London: Oxford University Press, 1995), 80.
13. Hermes Trismegistus, 12-13.
14. Johann Daniel Mylius, *Anatomia Auri* (Frankfurt: Lukas Jennis Bookseller, 1628), [n.p.].
15. *ibid.*
16. Michael Meier, *Atalanta Fugiens* (1618), in Alexander Roob, *Alchemy and Mysticism* (Koln: Taschen, 1997), 512.
17. Hermes Trismegistus, 117.
18. *Life Magazine*, (October 1997): 12-13.
19. Robert Edwards and Patrick Steptoe, *A Matter of Life* (London: Hutchinson, 1983).
20. Annette Burfoot, “In-appropriation - A critique of Proceed with Care,” *Women’s Studies International Forum* 18(4): 501.

## References

- Arnup, Katherine, Andrée Levesque and Ruth Roach Pierson. *Delivering Motherhood*. New York: Routledge, 1990.
- Balsamo, Anne. *Technologies of the Gendered Body*. Durham: Duke, 1996.
- Brodribb, Somer. *Nothing Mat(t)ers: A Feminist Critique of Postmodernism*. Melbourne: Spinifex, 1992.
- Burfoot, Annette. “In-appropriation - A critique of Proceed with Care,” *Women’s Studies International Forum* 18(4), 1995, pp. 499-506.
- Edwards, Robert and Patrick Steptoe. *A Matter of Life*. London: Hutchinson, 1983.

Hartman, George. *A Choice Collection of Rare Secrets and Experiments in Philosophy. As Also Rare and Unheard of Medicines, Menstruums, and Alkabefts; with the True Secret of Volarilizing the Fixt Salt of Tartar. Collected and Experimented by the Honourable and Truly Learned Sir Kenelm Digby, Kt. Chancellour to Her Majesty the Queen-Mother. Hitherto Kept Secret since his Decease, but now Published for the good and benefit of the publick*, 1682.

Hermes Trismegistus. *Hermetica* (c. 300). Translated by Walter Scott in 1924. Boston: Shambhala, 1985 edition.

Lippman, Abby. "Prenatal diagnosis: Reproductive choice? Reproductive control," *The Future of Human Reproduction*. Christine Overall (ed.) Toronto: Women's Press, 1989.

Mylius, Johann Daniel. *Anatomia Auri*. Frankfurt: Lukas Jennis, Bookseller, 1628.

Paracelsus. *The Archidoxes of Magic* (1656). London: Askin Pubs, 1975 edition.

Pechesky, Rosalind Pollack. "Fetal images: The power of visual culture in the politics of reproduction," *Feminist Studies*, 13(2), 1987, pp. 263-292.

Roob, Alexander. *The Hermetic Museum: Alchemy and Mysticism*. Köln: Taschen, 1997.

Thompson, William. *Gaia*. Great Barrington, MA: Lindisfarne Publishers, 1987.

Wills, Gary. *Witches and Jesuits: Shakespeare's Macbeth*. London: Oxford University Press, 1995.

Winston, Robert. Interviewed by A. Burfoot at Hammersmith Hospital, London, UK, January 11, 1988.

Yates, Frances. *The Occult Philosophy in the Elizabethan Age*. London: Ark, 1979.